


## Product Change Notification

<b>PCN Date:</b>	Jan 27, 2021	
<b>Supplier Name:</b>	Pulse Electronics	
<b>Pulse PCN No.</b>	PCN-100000291 Rev. B	
<b>Description of Change</b>	Adding 2 <sup>nd</sup> manufacturing site. No impact to product form, fit and function.	
<b>Reason for Change</b>	<ol style="list-style-type: none"> <li>1. Extend the manufacturing capacity to support customers</li> <li>2. Business contingency requirement</li> </ol>	
<b>Summary of Changes between the new and old part</b>	<b>Present</b>	<b>New</b>
	Manufacturing location: Dongguan	Manufacturing location: Dongguan
<b>Traceability guidelines</b>	By date code suffix, for example 2105-VJ.	
<b>Qualification Data attached? File name(s)</b>	168 hours qualification test is pass. Refer to below report.  JXD0-0001XNL qualification test r	
<b>Customer Part Number</b>	<b>Pulse Part Number</b>	<b>PCN Effectively Date</b>
/	JD0-0001NL	Apr 27,2021
/	JD0-0002NL	Apr 27,2021
/	JD0-0003NL	Apr 27,2021
/	JD0-0004NL	Apr 27,2021
/	JD0-0008NL	Apr 27,2021
/	JD0-0009NL	Apr 27,2021
/	JD0-0011NL	Apr 27,2021
/	JD0-0013NL	Apr 27,2021
/	JD0-0014NL	Apr 27,2021
/	JD0-0016NL	Apr 27,2021
/	JD0-0024NL	Apr 27,2021
/	JD0-0037NL	Apr 27,2021
/	JD0-0044NL	Apr 27,2021
/	JD1-0001NL	Apr 27,2021
/	JD1-0002NL	Apr 27,2021
/	JD1-0003NL	Apr 27,2021
/	JD1-0004NL	Apr 27,2021
/	JD1-0034NL	Apr 27,2021

/	JD1-0049NL	Apr 27,2021
/	JD1-0056NL	Apr 27,2021
/	JXD0-0001NL	Apr 27,2021
/	JXD0-0001XNL	Apr 27,2021
/	JXD0-0002NL	Apr 27,2021
/	JXD0-0006NL	Apr 27,2021
/	JXD0-0008NL	Apr 27,2021
/	JXD0-0009NL	Apr 27,2021
/	JXD0-0010NL	Apr 27,2021
/	JXD0-0012NL	Apr 27,2021
/	JXD0-0015NL	Apr 27,2021
/	JXD0-0017NL	Apr 27,2021
/	JXD0-0019NL	Apr 27,2021
/	JXD0-0020NL	Apr 27,2021
/	JXD0-0021NL	Apr 27,2021
/	JXD0-0025NL	Apr 27,2021
/	JXD0-0029NL	Apr 27,2021
/	JXD0-0030NL	Apr 27,2021
/	JXD0-0039NL	Apr 27,2021
/	JXD0-0046NL	Apr 27,2021
/	JXD0-0051NL	Apr 27,2021
/	JXD0-0101ANL	Apr 27,2021
/	JXD1-0001NL	Apr 27,2021
/	JXD1-0002NL	Apr 27,2021
/	JXD1-0005NL	Apr 27,2021
/	JXD1-0006NL	Apr 27,2021
/	JXD1-0007NL	Apr 27,2021
/	JXD1-0008NL	Apr 27,2021
/	JXD1-0009NL	Apr 27,2021
/	JXD1-0010ANL	Apr 27,2021
/	JXD1-0010NL	Apr 27,2021
/	JXD1-0014NL	Apr 27,2021
/	JXD1-0015NL	Apr 27,2021
/	JXD1-0018NL	Apr 27,2021
/	JXD1-0019NL	Apr 27,2021
/	JXD1-0022NL	Apr 27,2021
/	JXD1-0023NL	Apr 27,2021
/	JXD1-0024NL	Apr 27,2021
/	JXD1-0025NL	Apr 27,2021
/	JXD1-0026NL	Apr 27,2021
/	JXD1-0029NL	Apr 27,2021
/	JXD1-0037NL	Apr 27,2021
/	JXD1-0043NL	Apr 27,2021
/	JXD1-0045NL	Apr 27,2021
/	JXD1-0046NL	Apr 27,2021
/	JXD1-U0051NL	Apr 27,2021
/	JXD1-U0055NL	Apr 27,2021

**Customer: Generic**

**Originator: Levene Xu**

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## JXD0-0001XNL Qualification Report

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## JXD0-0001XNL Test Summary (Revision: A)

### 1. PURPOSE

This is an internal Pulse Qualification Plan to qualify part number JXD0-0001XNL which will be transferred to the VJ Manufacturing site, the same family parts can be qualified by similar construction or platform. No shipment of product will be made without authorization from Pulse Quality Organization. Data will be reviewed after 168 hours for conditional qualification. Testing to complete 1000 hours.

### 2. SCOPE

JXD0-0001XNL product is produced and tested in VJ Manufacturing site.

### 3. REFERENCES

JXD0-2015NL released document

### 4. TEST RESULTS

Sequence	Serial #	Test Description	Reference	Results	Remarks
1	1-10#	Visual Inspection	EIA 364-18 and PQ 5.025.000	PASS	N/A
2	1-10#	Electrical	Test Procedure on TLA	PASS	Appendix 1
3	1-10#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions	PASS	N/A
4	1-10#	Pre-condition	PQ: 2.107.050, Dip in solder pot 5-10 seconds, Clean for 10min, HIPOT one time before and after precondition for full electrical samples only	PASS	Appendix 2
5	1-10#	Visual Inspection	EIA 364-18 and PQ 5.025.00	PASS	N/A
6	1-10#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	PASS	Appendix 3
				PASS	
7	1-10#	Electrical	Test Procedure on TLA	PASS	N/A
8	1-10#	Temperature Life	EIA-364-17, Without load, condition 3, (105°C, 1000 hrs)	168 PASS	Appendix 4-5
9	1-10#	Visual Inspection	EIA 364-18 and PQ 5.025.00	TBD	N/A
10	1-10#	Electrical	Test Procedure on TLA	TBD	N/A
11	1-10#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	TBD	Appendix 6

**TEST GROUP 2 (12 units)**

Sequence	Serial #	Test Description	Reference	Results	Remarks
1	11-20#	Visual Inspection	EIA 364-18 and PQ 5.025.00	Pass	N/A
2	11-20#	Electrical	Test Procedure on TLA	Pass	Appendix 7
3	11-20#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions	Pass	N/A
4	11-20#	Pre-condition	PQ: 2.107.050,Dip in solder pot 5-10 seconds Clean for 10min, HIPOT one time before and after precondition for full electrical samples only	Pass	Appendix 8
5	11-20#	Visual Inspection	EIA 364-18 and PQ 5.025.00	Pass	N/A
6	11-20#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	Pass	Appendix 9
7	11-20#	Electrical	Test Procedure on TLA	Pass	N/A
8	11-20#	Thermal Shock	EIA-364-32 condition VIII (-20 to 85°C) , 1hour/cycle, total 100 Cycles	Pass	Appendix 10
9	11-20#	Electrical	Test Procedure on TLA	Pass	N/A
10	11-20#	Temperature Humidity	85RH/85 Deg C for 1,000hrs	TBD	Appendix 11-12
11	11-20#	Electrical	Test Procedure on TLA	TBD	N/A
12	11-20#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	TBD	Appendix 13

**TEST GROUP 3 (12 units)**

Sequence	Serial #	Test Description	Reference	Results	Remarks
1	21-30#	Visual Inspection	EIA 364-18 and PQ 5.025.00	PASS	N/A
2	21-30#	Electrical	Test Procedure on TLA	PASS	Appendix 14
3	21-30#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions	PASS	N/A
4	21-30#	Temperature life	EIA-364-17, method A, condition 4 (90C for 360 hours)	PASS	Appendix 15
5	21-30#	Visual Inspection	EIA 364-18 and PQ 5.025.00	PASS	N/A
6	21-30#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	PASS	Appendix 16
7	21-30#	Electrical	Test Procedure on TLA	PASS	N/A

**TEST GROUP 4 (9 units)**

Sequence	Serial #	Test Description	Reference	Results	Remarks
1	31-40#	Visual Inspection	EIA 364-18 and PQ 5.025.00	Pass	N/A
2	31-40#	Electrical Test	Test Procedure on TLA	Pass	Appendix 17
3	31-40#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions	Pass	N/A
4	31-40#	Pre-condition	PQ: 2.107.050, Dip in solder pot 5-10 seconds Clean for 10min, HIPOT one time before and after precondition for full electrical samples only	Pass	Appendix 18
5	31-40#	Solderability Visual Inspection	EIA 364-18 and PQ 5.025.00	Pass	N/A
6	31-40#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	Pass	Appendix 19
7	31-40#	Electrical Test	Test Procedure on TLA	Pass	N/A
8	31-40#	Resistance to solder heat	EIA-364-56, using wave with peak at 275 C through 3cycles electrical test after Resistance to solder heat and visual observations.	TBD	Appendix 20
9	31-40#	Visual Inspection	EIA 364-18 and PQ 5.025.00	TBD	N/A
10	31-40#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4	TBD	Appendix 21
11	31-40#	Electrical Test	Test Procedure on TLA	TBD	N/A

**TEST GROUP 5 (9 units)**

Sequence	Serial #	Test Description	Reference	Results	Remarks
1	41-49#	Visual Inspection	EIA 364-18 and PQ 5.025.00	PASS	N/A
2	41-49#	Electrical Test	Test Procedure on TLA	PASS	Appendix 22
3	41-43#	Gorilla Test	PQ2.107.099, test 4pcs port Min	PASS	Appendix 23
4	41-43#	Visual Inspection	EIA 364-18 and PQ 5.025.00	PASS	N/A
5	41-43#	Electrical Test	Test Procedure on TLA	PASS	
6	44-46#	Straight pull test	PQ2.107.091, One new sample perform straight pull test to failure, 4pcs port Min.	PASS	Appendix 24
7	47-49#	RJ45 FCC Terminal Test	PQ2.107.081, Total 10 insertions with 0.262" plug, taking pictures of FCC before and after insertion	PASS	Appendix 25

**5 . APPROVAL**

Jose Xu   
 Netwok-UPO QA Manager

**Appendix 1**  
**JXD0-0001XNL 0hr electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH	TRP	TRP	TRP	TRP	LL	
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	100KHz, 1mV	100KHz, 1mV	100KHz, 1mV	100KHz, 1mV	100KHz, 100mV	
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22)	(23),(26)	(24),(25)	(27),(28)	(21),(23)	(21),(24)	(21),(27)	(23),(24)	(23),(27)	(24),(27),(1)	(21,22),(9),(10),(1	(2,3)/(21,22)	(4,5)/(23,26)	(6,7)/(24,25)	8,9)/(27,28)	(3),(21,2		
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M	T	T	T	T	u	
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000	1.02	1.02	1.02	1.02	1	
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10	0.98	0.98	0.98	0.98	0.01	
AVERAGE =	0.27	0.28	0.27	0.27	0.28	0.27	0.28	0.27	0.86	0.85	0.86	0.85	151.90	149.90	149.30	149.20	150.90	150.20	9988.90	9977.10	1.00	1.00	1.00	1.00	0.24	
STD DEV =	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	2.62	2.55	2.97	2.82	2.84	2.56	33.30	68.70	0.00	0.00	0.00	0.00	0.03	
Cpu	33.51	50.58	27.83	34.20	28.04	41.59	38.42	31.07	11.84	14.92	10.71	12.99	1.66	1.98	1.76	1.87	1.65	1.93	50.16	24.37	8.47	9.09	17.67	11.07	7.50	
Cpl	11.10	16.89	9.08	11.20	9.42	13.78	12.97	10.12	15.90	19.48	14.43	16.93	2.15	1.95	1.61	1.68	1.86	1.98	99.89	48.36	7.58	7.98	15.67	10.01	2.24	
Cpk	11.10	16.89	9.08	11.20	9.42	13.78	12.97	10.12	11.84	14.92	10.71	12.99	1.66	1.95	1.61	1.68	1.65	1.93	50.16	24.37	7.58	7.98	15.67	10.01	2.24	
DATA	-----																									
1	0.268	0.272	0.267	0.273	0.282	0.278	0.273	0.266	0.856	0.848	0.858	0.842	154	148	154	151	153	151	10000	10000	0.999	0.999	0.998	0.999	0.234	
2	0.280	0.274	0.275	0.270	0.274	0.271	0.276	0.272	0.868	0.861	0.846	0.848	154	151	151	145	150	153	10000	10000	0.998	0.998	0.999	0.999	0.205	
3	0.268	0.270	0.270	0.274	0.271	0.275	0.284	0.265	0.851	0.867	0.846	0.854	154	148	151	153	151	147	9889	10000	0.998	0.999	0.999	1	0.219	
4	0.273	0.271	0.267	0.266	0.268	0.271	0.272	0.269	0.868	0.844	0.849	0.853	147	148	147	149	152	149	10000	10000	1	0.998	0.999	0.999	0.268	
5	0.279	0.278	0.271	0.269	0.266	0.281	0.278	0.277	0.850	0.845	0.863	0.847	152	155	145	149	145	147	10000	10000	0.999	0.998	0.999	0.998	0.189	
6	0.277	0.280	0.265	0.271	0.285	0.277	0.270	0.284	0.853	0.845	0.854	0.869	147	150	150	148	154	154	10000	10000	0.998	0.999	0.999	0.999	0.249	
7	0.282	0.278	0.283	0.267	0.277	0.268	0.275	0.275	0.857	0.849	0.871	0.865	153	153	146	146	147	149	10000	9771	0.999	1	0.999	1	0.192	
8	0.267	0.280	0.266	0.274	0.274	0.276	0.280	0.266	0.846	0.856	0.856	0.843	151	146	153	146	154	154	10000	10000	1	0.998	0.999	0.999	0.297	
9	0.277	0.275	0.275	0.283	0.284	0.277	0.275	0.275	0.879	0.862	0.877	0.860	153	151	146	152	153	148	10000	10000	1	0.998	0.998	0.999	0.261	
10	0.271	0.274	0.283	0.280	0.279	0.268	0.284	0.270	0.858	0.854	0.872	0.845	154	149	150	153	150	150	10000	10000	0.998	1	0.999	0.998	0.26	

TEST ITEM:	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1	RL2	RL2	RL2	RL2	RL2
CONDITION:	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	
PIN NO/ FRE.:	),(5),(23,2),(7),(24,2),(9),(27,2,21),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),()																									
UNIT:	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	1	1	1	3000	3000	3000	3000	1.3									-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0
MIN SPEC.:	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1										
AVERAGE =	0.25	0.24	0.25	475.30	471.80	490.40	490.70	1.01	-0.12	-0.70	-0.12	-0.71	-0.12	-0.68	-0.13	-0.69	-30.73	-28.42	-21.83	-18.05	-15.20	-30.44	-28.45	-21.88	-18.34	-13.88
STD DEV =	0.02	0.04	0.03	27.34	30.34	31.92	33.40	0.05	0.01	0.05	0.01	0.05	0.01	0.04	0.01	0.04	0.87	0.23	0.47	0.50	0.64	1.00	0.21	0.64	0.58	0.57
Cpu	10.35	6.13	8.99	30.78	27.77	26.21	25.04	1.94									5.62	17.82	6.94	5.33	3.76	4.79	19.49	5.12	4.76	3.43
Cpl	3.29	1.88	2.81	1.53	1.34	1.47	1.40	2.10	34.26	2.18	28.64	1.93	45.98	2.81	37.88	2.40										
Cpk	3.29	1.88	2.81	1.53	1.34	1.47	1.40	1.94	34.26	2.18	28.64	1.93	45.98	2.81	37.88	2.40	5.62	17.82	6.94	5.33	3.76	4.79	19.49	5.12	4.76	3.43
DATA																										
1	0.271	0.212	0.248	454	506	481	486	1.04	-0.122	-0.63	-0.136	-0.668	-0.13	-0.715	-0.133	-0.662	-29.266	-28.215	-21.37	-17.821	-15.522	-29.627	-28.404	-22.49	-17.157	-13.979
2	0.283	0.3	0.243	504	479	484	462	0.97	-0.131	-0.713	-0.11	-0.757	-0.114	-0.671	-0.129	-0.712	-31.832	-28.308	-22.249	-17.271	-15.191	-31.416	-28.25	-21.433	-18.944	-13.361
3	0.239	0.206	0.221	441	446	526	463	1	-0.114	-0.675	-0.134	-0.646	-0.126	-0.604	-0.123	-0.775	-29.68	-28.902	-21.735	-18.208	-14.765	-30.055	-28.226	-21.006	-18.095	-13.478
4	0.201	0.237	0.276	506	507	486	520	1.06	-0.113	-0.662	-0.117	-0.687	-0.126	-0.657	-0.128	-0.693	-29.978	-28.484	-21.782	-18.224	-15.44	-30.268	-28.648	-22.691	-18.717	-13.214
5	0.251	0.297	0.29	473	476	531	542	1.06	-0.111	-0.767	-0.138	-0.726	-0.118	-0.725	-0.139	-0.703	-31.061	-28.406	-22.366	-18.311	-14.868	-29.284	-28.757	-21.243	-18.789	-14.225
6	0.238	0.207	0.25	431	458	460	538	0.95	-0.117	-0.758	-0.114	-0.67	-0.129	-0.734	-0.129	-0.647	-31.509	-28.351	-21.284	-18.69	-15.881	-31.523	-28.688	-21.087	-18.149	-14.359
7	0.255	0.262	0.259	475	446	526	470	1.02	-0.122	-0.716	-0.128	-0.793	-0.117	-0.71	-0.123	-0.715	-30.162	-28.769	-22.757	-17.05	-13.807	-29.781	-28.24	-22.448	-18.819	-14.246
8	0.217	0.189	0.264	477	441	431	445	1.1	-0.125	-0.743	-0.111	-0.73	-0.113	-0.668	-0.135	-0.682	-30.683	-28.363	-21.422	-18.389	-15.8	-31.834	-28.673	-21.901	-17.443	-13.236
9	0.272	0.216	0.193	471	434	516	465	0.97	-0.138	-0.699	-0.118	-0.673	-0.113	-0.69	-0.12	-0.622	-31.256	-28.128	-21.931	-18.049	-14.726	-29.015	-28.445	-21.736	-18.638	-13.638
10	0.259	0.299	0.214	521	525	463	516	0.95	-0.111	-0.638	-0.13	-0.784	-0.124	-0.657	-0.111	-0.738	-31.868	-28.238	-21.373	-18.527	-15.991	-31.619	-28.172	-22.758	-18.639	-15.075



TEST ITEM:	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3	CT3	CT3	CT3	CMRR1	
CONDITION:	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	
PIN NO/ FRE.:																											
UNIT:	dB																										
MAX SPEC:	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																											
AVERAGE =	-29.95	-28.46	-22.02	-17.90	-14.47	-30.42	-28.54	-22.30	-18.07	-14.13	-34.75	-35.11	-34.42	-34.84	-34.89	-35.26	-35.06	-34.33	-34.74	-35.74	-34.76	-33.25	-34.91	-34.13	-35.31	-35.15	
STD DEV =	0.75	0.26	0.53	0.49	0.96	0.77	0.24	0.53	0.60	0.73	1.08	1.16	1.00	1.20	1.15	1.25	1.02	1.02	1.13	1.07	1.13	0.75	1.09	0.93	1.15	1.25	
Cpu	6.22	16.17	6.32	5.34	2.25	6.28	17.20	6.52	4.51	2.79	1.47	1.46	1.48	1.35	1.41	1.41	1.65	1.41	1.40	1.79	1.40	1.45	1.50	1.48	1.54	1.37	
Cpl																											
Cpk	6.22	16.17	6.32	5.34	2.25	6.28	17.20	6.52	4.51	2.79	1.47	1.46	1.48	1.35	1.41	1.41	1.65	1.41	1.40	1.79	1.40	1.45	1.50	1.48	1.54	1.37	
DATA																											
1	-29.185	-28.795	-22.544	-17.318	-13.092	-29.971	-28.787	-22.971	-18.635	-14.293	-34.146	-35.844	-34.912	-34.472	-34.817	-34.45	-33.752	-35.395	-34.831	-33.058	-34.119	-32.557	-34.923	-35.18	-35.343	-34.713	
2	-29.946	-28.138	-22.333	-17.876	-13.512	-29.544	-28.687	-21.528	-18.969	-14.196	-34.271	-34.466	-36.057	-34.283	-34.239	-34.788	-36.183	-35.882	-35.252	-35.581	-33.685	-32.773	-35.275	-34.669	-36.622	-32.981	
3	-30.164	-28.307	-22.419	-18.075	-13.988	-30.846	-28.552	-22.779	-18.616	-13.132	-33.499	-36.254	-34.64	-36.287	-33.152	-33.501	-34.411	-33.198	-36.447	-35.985	-34.688	-33.652	-36.824	-33.003	-35.81	-36.063	
4	-31.028	-28.756	-21.597	-18.59	-13.038	-31.777	-28.479	-22.385	-17.088	-14.05	-34.714	-36.316	-34.955	-36.53	-36.95	-36.926	-34.649	-33.153	-34.45	-36.729	-34.041	-32.805	-34.671	-34.904	-35.54	-36.675	
5	-30.138	-28.071	-21.346	-17.54	-15.633	-30.185	-28.847	-21.921	-18.018	-13.911	-36.912	-34.64	-34.183	-34.734	-34.124	-34.928	-34.026	-34.306	-34.323	-36.605	-33.324	-33.772	-32.332	-33.287	-35.691	-35.986	
6	-29.14	-28.427	-21.781	-17.622	-15.132	-31.009	-28.9	-21.952	-17.174	-13.6	-35.664	-36.015	-35.471	-35.292	-33.997	-36.7	-36.518	-35.195	-36.972	-35.013	-36.953	-32.284	-35.643	-34.204	-36.302	-34.429	
7	-31.173	-28.358	-22.613	-17.557	-15.37	-29.432	-28.379	-21.61	-18.196	-14.172	-34.739	-35.751	-34.629	-34.528	-34.746	-36.728	-34.057	-34.701	-33.832	-36.816	-34.585	-33.471	-34.584	-34.317	-33.554	-36.797	
8	-30.48	-28.871	-22.55	-18.958	-14.884	-29.503	-28.25	-22.056	-18.449	-13.269	-34.294	-34.952	-32.597	-32.408	-36.921	-33.943	-35.592	-32.619	-33.189	-35.282	-36.515	-33.925	-34.263	-34.283	-32.922	-33.358	
9	-29.01	-28.44	-21.054	-17.934	-15.625	-31.055	-28.31	-22.908	-17.81	-15.738	-33.275	-32.271	-33.593	-36.073	-35.098	-36.473	-36.574	-33.962	-33.706	-35.877	-35.46	-32.532	-35.456	-35.163	-34.971	-35.749	
10	-29.283	-28.431	-21.955	-17.52	-14.46	-30.91	-28.198	-22.866	-17.698	-14.956	-36.007	-34.562	-33.212	-33.765	-34.828	-34.152	-34.814	-34.894	-34.446	-36.429	-34.211	-34.757	-35.112	-32.258	-36.381	-34.775	

TEST ITEM:	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, ε
PIN NO/ FRE.:																				1mA
UNIT:	dB																			1mA
MAX SPEC:	-30.0																			
MIN SPEC:																				
AVERAGE =	-34.56	-35.34	-34.31	-34.77	-35.08	-35.87	-34.58	-34.80	-34.94	-34.73	-35.03	-34.28	-34.13	-35.12	-35.19	-34.77	-34.10	-34.52	-34.17	
STD DEV =	1.05	1.19	0.89	1.01	1.16	0.97	0.97	1.19	1.07	1.06	1.22	1.07	1.01	1.10	1.07	0.95	1.01	1.04	1.01	
Cpu	1.45	1.50	1.61	1.58	1.46	2.02	1.57	1.35	1.53	1.49	1.37	1.34	1.36	1.54	1.62	1.67	1.35	1.45	1.37	
Cpl																				
Cpk	1.45	1.50	1.61	1.58	1.46	2.02	1.57	1.35	1.53	1.49	1.37	1.34	1.36	1.54	1.62	1.67	1.35	1.45	1.37	
DATA																				
1	-34.385	-35.653	-34.455	-34.894	-34.227	-35.66	-33.244	-35.318	-33.807	-34.95	-34.95	-33.109	-34.609	-36.297	-34.663	-36.111	-34.79	-34.907	-34.14	PASS
2	-35.984	-36.702	-34.784	-34.196	-34.761	-36.811	-35.461	-36	-33.752	-33.919	-34.545	-34.617	-33.191	-35.974	-36.244	-34.723	-36.171	-36.234	-35.14	PASS
3	-34.678	-36.704	-33.203	-33.586	-34.739	-33.798	-33.427	-34.304	-35.814	-33.202	-36.627	-32.058	-34.592	-33.18	-34.988	-34.711	-33.038	-34.976	-34.814	PASS
4	-34.482	-34.917	-35.281	-34.312	-36.834	-34.932	-35.337	-36.772	-34.902	-36.71	-34.765	-34.408	-34.18	-33.448	-36.78	-35.163	-34.419	-36.03	-33.961	PASS
5	-35.562	-35.038	-34.337	-35.902	-33.585	-36.148	-33.358	-34.998	-33.134	-35.174	-35.54	-35.934	-33.791	-34.407	-34.367	-35.414	-33.367	-33.219	-34.99	PASS
6	-35.847	-33.156	-34.398	-34.026	-35.875	-36.69	-34.554	-33.689	-34.36	-34.804	-36.267	-34.095	-35.944	-35.57	-34.359	-34.787	-33.033	-34.986	-34.897	PASS
7	-32.329	-36.479	-33.237	-36.365	-34.821	-36.995	-34.477	-33.89	-36.536	-35.282	-32.194	-34.459	-35.15	-36.138	-33.716	-33.241	-34.707	-34.17	-33.143	PASS
8	-34.068	-36.343	-32.791	-33.7	-36.513	-35.31	-34.814	-36.01	-35.611	-35.78	-35.148	-35.449	-33.403	-36.153	-36.067	-35.949	-32.672	-34.191	-32.31	PASS
9	-33.537	-33.799	-35.041	-34.339	-36.158	-35.582	-36.416	-34.315	-35.383	-33.176	-36.184	-33.733	-32.168	-34.412	-34.088	-34.521	-34.388	-33.296	-32.918	PASS
10	-34.679	-34.576	-35.548	-36.353	-33.268	-36.816	-34.727	-32.696	-36.077	-34.272	-34.049	-34.968	-34.266	-35.585	-36.586	-33.066	-34.407	-33.228	-35.435	PASS

**Appendix 2**  
**JXD0-0001XNL After Pre-condition electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH	TRP	TRP	TRP	TRP	LL	
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100mV	
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22)	(23),(26)	(24),(25)	(27),(28)	(21),(23)	(21),(24)	(21),(27)	(23),(24)	(23),(27)	(24),(27)	(1),(21,22,4)	(9),(10),(2,3)	(21,224,5)	(23,266,7)	(24,258,9)	(27,28)	(3),(21,2	
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M	T	T	T	T	u	
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000	1.02	1.02	1.02	1.02	1	
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10	0.98	0.98	0.98	0.98	0.01	
AVERAGE =	0.28	0.28	0.27	0.28	0.27	0.28	0.27	0.27	0.85	0.85	0.86	0.86	148.80	150.30	150.20	150.40	150.00	148.40	9956.80	9988.30	1.00	1.00	1.00	1.00	0.23	
STD DEV =	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	3.16	2.65	3.12	3.10	2.68	2.58	129.60	35.10	0.00	0.00	0.00	0.00	0.02	
Cpu	24.43	38.34	21.11	26.02	41.23	29.53	37.18	32.46	21.46	15.60	11.99	9.75	1.71	1.85	1.58	1.57	1.86	2.15	12.97	47.59	8.47	11.56	13.06	7.83	13.45	
Cpl	8.44	12.81	6.99	8.73	13.70	10.02	12.33	10.57	27.32	20.54	16.04	13.28	1.46	1.93	1.62	1.65	1.86	1.73	25.58	94.76	7.58	10.67	11.70	7.08	3.91	
Cpk	8.44	12.81	6.99	8.73	13.70	10.02	12.33	10.57	21.46	15.60	11.99	9.75	1.46	1.85	1.58	1.57	1.86	1.73	12.97	47.59	7.58	10.67	11.70	7.08	3.91	
DATA	-----																									
1	0.286	0.275	0.271	0.269	0.276	0.274	0.270	0.275	0.840	0.857	0.859	0.871	146	151	146	154	152	146	10000	10000	0.998	0.999	0.999	0.998	0.233	
2	0.287	0.272	0.267	0.275	0.277	0.283	0.268	0.267	0.854	0.867	0.860	0.844	151	153	150	154	154	152	10000	10000	1	0.999	0.999	0.998	0.198	
3	0.284	0.268	0.266	0.277	0.275	0.285	0.271	0.268	0.848	0.852	0.849	0.848	147	152	154	155	150	151	10000	10000	0.999	0.999	0.999	0.999	0.228	
4	0.270	0.279	0.278	0.287	0.276	0.284	0.271	0.274	0.854	0.847	0.861	0.861	147	149	153	149	151	146	10000	10000	0.999	1	0.998	0.999	0.234	
5	0.275	0.277	0.289	0.270	0.273	0.284	0.285	0.272	0.858	0.858	0.870	0.875	148	146	147	146	150	151	10000	9883	0.999	1	0.999	1	0.229	
6	0.285	0.271	0.283	0.276	0.274	0.271	0.279	0.270	0.849	0.856	0.868	0.852	155	147	149	147	147	147	10000	10000	0.998	0.999	0.999	0.998	0.242	
7	0.278	0.284	0.269	0.284	0.274	0.273	0.275	0.275	0.842	0.847	0.859	0.874	153	153	155	152	145	146	9568	10000	1	0.999	1	0.998	0.218	
8	0.268	0.278	0.285	0.273	0.270	0.272	0.273	0.285	0.845	0.844	0.844	0.874	146	153	153	147	152	152	10000	10000	1	0.999	0.998	1	0.247	
9	0.289	0.271	0.266	0.265	0.284	0.269	0.275	0.269	0.847	0.852	0.841	0.849	150	152	148	151	152	146	10000	10000	0.998	1	0.999	1	0.224	
10	0.275	0.278	0.268	0.283	0.267	0.278	0.276	0.265	0.844	0.866	0.867	0.866	145	147	147	149	147	147	10000	10000	0.998	0.998	0.999	1	0.275	

TEST ITEM:	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1	RL2	RL2	RL2	RL2
CONDITION:	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz
PIN NO/ FRE.:	(5)	(23,2)	(7)	(24,2)	(9)	(27,221)	(22)	(23)	(26)	(24)	(25)	(27)	(28)	(23,24,25,26,27,28)	(1)										
UNIT:	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	1	1	1	3000	3000	3000	3000	1.3									-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0
MIN SPEC.:	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1									
AVERAGE =	0.24	0.23	0.25	484.20	485.80	491.70	492.00	1.01	-0.12	-0.71	-0.12	-0.69	-0.12	-0.70	-0.12	-0.66	-30.41	-28.48	-22.33	-17.85	-13.79	-30.13	-28.48	-21.80	-17.74
STD DEV =	0.03	0.04	0.03	29.54	31.78	32.19	32.27	0.04	0.01	0.05	0.01	0.05	0.01	0.05	0.01	0.04	0.79	0.29	0.36	0.55	0.71	0.97	0.27	0.54	0.45
Cpu	8.20	6.79	7.52	28.39	26.37	25.98	25.90	2.36									6.06	14.26	9.66	4.79	2.72	4.83	15.62	6.03	5.69
Cpl	2.49	1.99	2.44	1.51	1.42	1.47	1.47	2.54	28.58	1.86	37.85	1.97	37.13	1.91	39.16	2.52									
Cpk	2.49	1.99	2.44	1.51	1.42	1.47	1.47	2.36	28.58	1.86	37.85	1.97	37.13	1.91	39.16	2.52	6.06	14.26	9.66	4.79	2.72	4.83	15.62	6.03	5.69
DATA																									
1	0.298	0.271	0.227	506	484	444	548	1.04	-0.136	-0.69	-0.117	-0.625	-0.128	-0.706	-0.124	-0.613	-29.711	-28.055	-22.401	-17.924	-15.6	-29.111	-28.016	-22.787	-17.84
2	0.203	0.239	0.275	485	485	472	499	0.99	-0.11	-0.796	-0.119	-0.719	-0.115	-0.636	-0.117	-0.635	-31.644	-28.119	-22.13	-17.184	-13.495	-29.157	-28.271	-21.472	-18.305
3	0.247	0.199	0.294	483	461	547	510	1.09	-0.118	-0.768	-0.127	-0.649	-0.117	-0.765	-0.112	-0.608	-30.938	-28.895	-22.752	-18.434	-13.482	-30.955	-28.324	-21.089	-18.149
4	0.279	0.19	0.237	455	482	513	464	0.99	-0.131	-0.651	-0.12	-0.626	-0.134	-0.788	-0.126	-0.699	-29.075	-28.855	-22.541	-18.519	-14.038	-29.219	-28.67	-21.372	-17.94
5	0.258	0.204	0.187	533	543	507	522	1.06	-0.138	-0.63	-0.127	-0.659	-0.136	-0.749	-0.115	-0.681	-30.744	-28.532	-22.103	-17.919	-13.364	-29.83	-28.126	-21.279	-17.419
6	0.218	0.181	0.254	469	446	468	467	0.99	-0.115	-0.734	-0.122	-0.667	-0.112	-0.616	-0.118	-0.608	-29.274	-28.117	-22.488	-18.645	-13.136	-29.429	-28.766	-21.608	-17.719
7	0.215	0.262	0.252	466	537	541	480	0.95	-0.111	-0.677	-0.125	-0.792	-0.118	-0.704	-0.129	-0.647	-30.745	-28.608	-22.712	-17.407	-14.179	-31.649	-28.789	-22.493	-17.325
8	0.221	0.236	0.277	527	443	466	445	1	-0.126	-0.713	-0.111	-0.704	-0.116	-0.694	-0.113	-0.708	-30.541	-28.36	-22.641	-17.211	-14.107	-31.737	-28.652	-22.391	-17.252
9	0.208	0.293	0.221	433	480	479	526	1.03	-0.123	-0.686	-0.137	-0.759	-0.124	-0.705	-0.137	-0.745	-30.226	-28.726	-21.717	-18.081	-13.432	-30.609	-28.721	-21.86	-18.439
10	0.26	0.274	0.297	485	497	480	459	0.97	-0.137	-0.769	-0.136	-0.684	-0.118	-0.661	-0.121	-0.674	-31.217	-28.508	-21.775	-17.178	-13.067	-29.576	-28.47	-21.661	-17.022

TEST ITEM:	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3	CT3	CT3	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	
PIN NO/ FRE.:																										
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																										
AVERAGE =	-14.85	-30.37	-28.55	-21.85	-17.97	-14.61	-30.13	-28.43	-21.87	-18.23	-14.45	-34.41	-34.08	-33.79	-34.78	-34.93	-34.80	-34.87	-34.74	-34.92	-35.09	-33.67	-34.88	-34.73	-34.43	
STD DEV =	0.80	0.94	0.22	0.42	0.60	0.86	0.88	0.23	0.61	0.44	0.76	0.90	0.94	0.94	1.17	1.06	0.97	1.15	1.03	1.17	1.15	0.90	1.10	0.99	0.99	
Cpu	2.87	5.07	19.25	7.84	4.42	2.57	5.36	17.71	5.41	6.29	2.83	1.63	1.45	1.34	1.36	1.55	1.65	1.42	1.54	1.40	1.47	1.35	1.48	1.59	1.50	
Cpl																										
Cpk	2.87	5.07	19.25	7.84	4.42	2.57	5.36	17.71	5.41	6.29	2.83	1.63	1.45	1.34	1.36	1.55	1.65	1.42	1.54	1.40	1.47	1.35	1.48	1.59	1.50	
DATA																										
1	-15.201	-30.528	-28.489	-22.19	-18.837	-15.101	-29.684	-28.696	-21.841	-17.958	-14.474	-34.126	-34.692	-34.286	-33.668	-34.808	-33.499	-35.03	-34.897	-33.611	-34.058	-32.666	-34.452	-34.099	-35.756	
2	-15.483	-29.005	-28.425	-21.951	-17.122	-15.674	-29.568	-28.612	-21.261	-17.548	-14.363	-33.649	-33.735	-33.248	-35.158	-36.668	-34.015	-34.823	-34.997	-34.269	-35.642	-34.029	-33.863	-35.805	-34.241	
3	-13.656	-29.839	-28.965	-21.259	-18.206	-14.328	-29.579	-28.207	-21.49	-18.095	-15.188	-33.638	-34.526	-33.541	-35.03	-33.385	-33.77	-34.837	-33.299	-34.788	-36.853	-32.823	-35.871	-34.825	-34.212	
4	-13.574	-31.566	-28.451	-22.165	-17.822	-13.301	-29.115	-28.322	-22.391	-17.732	-15.81	-35.394	-34.272	-33.008	-34.653	-34.245	-36.131	-34.504	-33.221	-33.931	-33.794	-34.257	-36.72	-36.182	-34.922	
5	-14.341	-30.738	-28.513	-21.248	-18.812	-13.782	-29.239	-28.642	-22.806	-18.944	-15.211	-35.048	-35.628	-32.476	-33.393	-36.732	-35.664	-36.1	-34.194	-36.831	-35.632	-34.467	-34.113	-33.189	-35.641	
6	-14.707	-29.443	-28.227	-22.242	-17.196	-14.265	-29.499	-28.584	-21.148	-18.795	-13.39	-34.398	-34.833	-35.502	-36.501	-34.19	-35.834	-36.765	-36.838	-33.724	-35.085	-35.554	-36.107	-34.526	-33.247	
7	-15.637	-29.139	-28.47	-21.559	-17.808	-15.374	-31.371	-28.411	-22.781	-18.196	-14.24	-32.94	-32.418	-33.643	-36.307	-34.304	-35.21	-32.529	-34.914	-34.38	-35.431	-33.32	-34.501	-33.368	-35.241	
8	-14.397	-31.291	-28.516	-22.521	-17.269	-13.532	-31.35	-28.688	-21.276	-18.027	-14.499	-36.012	-33.902	-35.383	-33.156	-35.738	-34.005	-35.83	-35.786	-36.413	-35.694	-32.635	-32.979	-34.375	-33.972	
9	-15.584	-30.382	-28.516	-21.822	-18.222	-14.908	-31.323	-28.007	-21.439	-18.7	-13.214	-33.835	-32.569	-33.133	-36.039	-34.96	-34.056	-33.686	-34.918	-36.634	-32.74	-32.971	-35.572	-34.879	-34.621	
10	-15.907	-31.769	-28.946	-21.496	-18.395	-15.867	-30.617	-28.169	-22.241	-18.268	-14.153	-35.079	-34.209	-33.666	-33.914	-34.265	-35.854	-34.605	-34.288	-34.622	-36.02	-33.999	-34.595	-36.041	-32.458	

TEST ITEM:	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	Hipot		
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, 6	
PIN NO/ FRE.:																							
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	1mA
MAX SPEC:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																							
AVERAGE =	-34.59	-34.70	-34.69	-34.56	-35.30	-34.87	-34.02	-35.60	-35.05	-33.91	-33.59	-35.06	-35.04	-34.84	-34.94	-35.01	-35.38	-34.48	-34.64	-35.37	-34.39		
STD DEV =	1.13	1.11	0.95	1.05	0.96	1.06	1.00	0.95	1.24	0.93	0.82	1.24	1.21	1.15	0.93	1.08	1.15	0.89	1.08	0.97	1.03		
Cpu	1.35	1.41	1.65	1.46	1.84	1.54	1.35	1.97	1.36	1.41	1.45	1.36	1.39	1.41	1.78	1.55	1.56	1.68	1.44	1.84	1.42		
Cpl																							
Cpk	1.35	1.41	1.65	1.46	1.84	1.54	1.35	1.97	1.36	1.41	1.45	1.36	1.39	1.41	1.78	1.55	1.56	1.68	1.44	1.84	1.42		
DATA																							
1	-34.947	-33.56	-33.87	-35.087	-36.398	-35.692	-35.744	-35.076	-35.294	-33.674	-33.904	-34.685	-36.953	-34.331	-34.26	-32.816	-34.836	-35.727	-34.029	-35.432	-33.019	PASS	
2	-35.138	-34.839	-34.132	-33.478	-35.282	-34.737	-34.734	-35.435	-36.332	-34.437	-34.855	-34.218	-34.108	-32.081	-34.188	-34.333	-36.951	-35.742	-34.076	-36.155	-35.858	PASS	
3	-32.977	-33.113	-33.495	-35.104	-34.264	-34.582	-34.107	-36.986	-34.502	-34.972	-33.39	-36.122	-34.045	-36.201	-34.943	-36.074	-33.562	-33.265	-36.568	-36.637	-33.686	PASS	
4	-33.492	-36.192	-34.994	-34.842	-34.559	-34.311	-34.834	-36.791	-34.22	-33.711	-32.586	-32.625	-35.967	-35.819	-33.364	-36.485	-35.156	-34.761	-34.797	-35.706	-34.294	PASS	
5	-35.73	-34.252	-36.809	-34.071	-36.713	-35.819	-32.853	-34.895	-34.303	-33.402	-33.327	-34.544	-36.988	-35.675	-35.348	-34.315	-35.564	-35.066	-33.234	-35.848	-35.432	PASS	
6	-35.276	-34.924	-35.048	-34.459	-33.72	-34.801	-34.863	-35.806	-36.721	-33.004	-32.757	-36.695	-35.921	-34.199	-35.967	-34.563	-36.974	-33.895	-36.379	-34.042	-32.579	PASS	
7	-35.389	-34.055	-34.236	-34.445	-34.761	-34.644	-34.159	-36.559	-34.277	-35.813	-33.258	-33.689	-34.476	-34.468	-36.643	-34.964	-33.871	-34.903	-34.049	-33.192	-34.722	PASS	
8	-36.208	-36.932	-34.484	-36.087	-36.358	-36.28	-33.007	-35.348	-35.334	-32.614	-33.251	-36.035	-33.891	-34.929	-34.55	-36.364	-35.565	-33.05	-35.145	-35.451	-34.014	PASS	
9	-33.988	-35.139	-35.8	-32.31	-35.011	-35.526	-33.397	-35.475	-36.81	-33.185	-33.231	-35.985	-34.07	-35.929	-34.42	-34.586	-34.631	-33.966	-33.389	-35.983	-34.817	PASS	
10	-32.803	-34.017	-34.075	-35.766	-35.889	-32.284	-32.522	-33.64	-32.708	-34.334	-35.294	-35.984	-33.993	-34.735	-35.67	-35.603	-36.691	-34.439	-34.783	-35.268	-35.508	PASS	

## Appendix 3

### Mating/Unmating force test data

<i>Mating/Unmating</i>		
TEST ITEM:	Insertion force	Withdrawal force
PIN NO:	RJ45	RJ45
UNIT:	kg	kg
1#	4.30	1.98
2#	4.59	2.44
3#	4.79	2.33
4#	4.77	1.99
5#	4.94	2.26
6#	4.78	1.84
7#	4.44	2.37
8#	4.41	1.73
9#	4.32	1.89
10#	4.37	2.15

### Appendix 4

#### JXD0-0001XNL After Temperature Life 168HRS electrical test data.

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22),(23),(26),(24),(25),(27),(28),(21),(23),(21),(24),(21),(27),(23),(24),(23),(27),(24),(27),(1),(21,22,(9),(10),(											
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M
MAX SPEC.:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10
AVERAGE =	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.86	0.86	0.86	0.86	150.40	151.20	148.70	150.00	150.70	150.00	9967.50	9998.80
STD DEV =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.87	2.52	2.65	3.58	2.87	3.49	97.50	3.60
Cpu	29.17	23.64	25.12	22.94	28.46	24.24	27.38	24.76	10.18	8.93	10.46	8.04	1.70	1.82	2.05	1.40	1.66	1.43	17.21	463.07
Cpl	9.96	8.17	8.58	7.75	9.67	8.43	9.22	8.15	13.96	11.98	14.00	10.81	1.79	2.14	1.72	1.40	1.83	1.43	34.04	924.89
Cpk	9.96	8.17	8.58	7.75	9.67	8.43	9.22	8.15	10.18	8.93	10.46	8.04	1.70	1.82	1.72	1.40	1.66	1.43	17.21	463.07
DATA	-----																			
1	0.273	0.269	0.287	0.270	0.279	0.288	0.273	0.285	0.856	0.871	0.848	0.854	151	145	146	145	146	148	10000	10000
2	0.286	0.283	0.270	0.284	0.276	0.274	0.276	0.268	0.855	0.869	0.859	0.858	154	154	146	152	151	147	9675	10000
3	0.266	0.266	0.272	0.272	0.265	0.289	0.270	0.272	0.865	0.867	0.842	0.842	149	150	150	154	155	155	10000	10000
4	0.287	0.277	0.276	0.286	0.270	0.275	0.286	0.270	0.846	0.843	0.857	0.841	145	153	148	146	148	150	10000	10000
5	0.279	0.286	0.287	0.267	0.273	0.266	0.285	0.288	0.866	0.851	0.853	0.846	152	150	148	154	152	155	10000	10000
6	0.274	0.287	0.268	0.277	0.282	0.288	0.269	0.272	0.879	0.869	0.863	0.879	151	153	151	154	154	150	10000	10000
7	0.276	0.282	0.282	0.284	0.286	0.286	0.267	0.266	0.848	0.877	0.872	0.869	150	154	154	149	148	147	10000	9988
8	0.279	0.283	0.273	0.281	0.282	0.283	0.280	0.266	0.863	0.844	0.857	0.847	146	151	145	153	150	146	10000	10000
9	0.280	0.289	0.286	0.290	0.281	0.280	0.276	0.273	0.880	0.851	0.848	0.874	152	151	148	147	154	155	10000	10000
10	0.282	0.275	0.281	0.276	0.281	0.278	0.282	0.274	0.869	0.842	0.880	0.877	154	151	151	146	149	147	10000	10000



TEST ITEM:	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1	RL2	
CONDITION:	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100m100kHz	100m100kHz	100m100kHz	100m100kHz	100m100kHz	100m100kHz	100m100kHz	100m100kHz	100m100kHz	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz
PIN NO/ FRE.:	2,3)	(21,224,5)	(23,266,7)	(24,268,9)	(27,28),(3),(21,2)	(5),(23,2)	(7),(24,2)	(9),(27,221)	(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(																			
UNIT:	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC.:	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3															
MIN SPEC.:	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	
AVERAGE =	1.00	1.00	1.00	1.00	0.23	0.26	0.24	0.24	495.00	485.20	492.80	502.70	1.06	-0.13	-0.70	-0.12	-0.68	-0.13	-0.67	-0.13	-0.72	-31.11	-28.53	-22.05	-17.95	-14.34	-30.37	
STD DEV =	0.00	0.00	0.00	0.00	0.04	0.02	0.04	0.03	30.15	32.28	34.79	30.98	0.04	0.01	0.05	0.01	0.07	0.01	0.05	0.01	0.06	0.70	0.30	0.52	0.59	0.92	0.79	
Cpu	10.78	9.95	9.44	11.78	6.55	12.21	7.13	7.34	27.70	25.97	24.02	26.87	2.07									7.22	13.88	6.39	4.49	2.30	6.04	
Cpl	10.05	9.10	8.37	10.44	1.92	4.17	2.13	2.25	1.60	1.40	1.37	1.64	3.10	34.99	2.11	29.27	1.56	42.81	2.15	33.50	1.67							
Cpk	10.05	9.10	8.37	10.44	1.92	4.17	2.13	2.25	1.60	1.40	1.37	1.64	2.07	34.99	2.11	29.27	1.56	42.81	2.15	33.50	1.67	7.22	13.88	6.39	4.49	2.30	6.04	
DATA																												
1	1	0.999	1	0.999	0.202	0.232	0.265	0.297	518	518	492	541	0.98	-0.115	-0.664	-0.136	-0.614	-0.139	-0.697	-0.139	-0.634	-30.289	-28.902	-21.56	-17.917	-14.011	-30.772	
2	1	0.999	0.998	0.999	0.215	0.279	0.187	0.259	483	482	469	486	1.04	-0.125	-0.679	-0.124	-0.751	-0.125	-0.622	-0.119	-0.753	-30.793	-28.559	-21.969	-18.853	-13.883	-30.832	
3	1	1	1	0.999	0.299	0.269	0.296	0.275	492	503	508	537	1.08	-0.115	-0.623	-0.133	-0.757	-0.138	-0.737	-0.138	-0.676	-30.878	-28.962	-21.381	-17.162	-15.964	-31.399	
4	0.999	1	0.999	0.999	0.191	0.237	0.235	0.189	464	470	447	509	1.09	-0.138	-0.681	-0.131	-0.617	-0.137	-0.601	-0.128	-0.768	-31.24	-28.319	-22.953	-17.927	-14.093	-29.964	
5	0.999	1	0.998	0.999	0.276	0.239	0.25	0.247	436	540	436	484	1.08	-0.125	-0.74	-0.112	-0.788	-0.12	-0.731	-0.123	-0.717	-31.184	-28.431	-21.462	-17.212	-15.267	-29.984	
6	1	0.998	0.999	0.998	0.207	0.248	0.216	0.204	474	501	516	493	1	-0.129	-0.676	-0.123	-0.647	-0.127	-0.623	-0.132	-0.641	-29.657	-28.05	-21.759	-17.262	-13.081	-31.22	
7	0.998	0.998	0.998	0.999	0.21	0.29	0.221	0.235	517	458	533	515	1.1	-0.13	-0.673	-0.139	-0.672	-0.126	-0.717	-0.111	-0.798	-31.385	-28.842	-22.598	-17.915	-13.877	-31.294	
8	0.999	0.999	0.999	0.998	0.196	0.276	0.225	0.283	539	446	532	478	1.06	-0.112	-0.746	-0.112	-0.62	-0.124	-0.705	-0.136	-0.677	-31.935	-28.691	-21.846	-18.074	-14.386	-29.32	
9	0.999	0.999	0.998	0.998	0.275	0.284	0.29	0.231	528	503	464	543	1.08	-0.131	-0.798	-0.116	-0.605	-0.13	-0.603	-0.135	-0.78	-31.839	-28.127	-22.692	-18.252	-13.225	-29.188	
10	0.999	0.999	0.999	1	0.273	0.265	0.191	0.206	499	431	531	441	1.09	-0.134	-0.67	-0.112	-0.751	-0.12	-0.662	-0.133	-0.75	-31.894	-28.432	-22.282	-18.91	-15.567	-29.685	

TEST ITEM:	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3	CT3	CT3
CONDITION:	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz
PIN NO/ FRE.:																												
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																												
AVERAGE =	-28.59	-22.16	-18.20	-14.49	-30.46	-28.49	-22.01	-18.04	-14.67	-30.14	-28.67	-21.80	-18.02	-14.22	-34.77	-34.46	-35.04	-34.79	-34.86	-35.10	-35.23	-34.50	-35.64	-33.94	-34.83	-34.59	-34.57	-34.31
STD DEV =	0.28	0.44	0.47	0.84	0.80	0.20	0.62	0.48	0.42	0.93	0.23	0.70	0.59	0.59	1.13	1.04	1.03	1.07	1.03	1.16	1.08	1.10	1.19	0.97	1.19	0.94	1.10	1.05
Cpu	15.19	7.73	5.81	2.56	6.03	20.61	5.37	5.54	5.35	5.09	18.48	4.69	4.56	3.50	1.41	1.43	1.62	1.50	1.57	1.47	1.62	1.36	1.58	1.36	1.35	1.63	1.39	1.37
Cpl																												
Cpk	15.19	7.73	5.81	2.56	6.03	20.61	5.37	5.54	5.35	5.09	18.48	4.69	4.56	3.50	1.41	1.43	1.62	1.50	1.57	1.47	1.62	1.36	1.58	1.36	1.35	1.63	1.39	1.37
DATA																												
1	-28.406	-22.918	-18.169	-14.48	-29.883	-28.498	-21.775	-18.341	-14.37	-29.697	-28.766	-21.022	-17.21	-14.047	-34.96	-36.507	-34.898	-34.796	-34.542	-36.485	-34.434	-34.519	-35.808	-35.174	-34.572	-35.798	-35.826	-34.52
2	-28.68	-21.925	-18.666	-15.34	-29.493	-28.865	-22.874	-18.659	-14.712	-30.904	-28.692	-22.834	-18.172	-13.701	-35.51	-36.396	-34.76	-36.939	-35.094	-33.292	-36.439	-33.332	-35.931	-33.154	-33.004	-33.658	-34.43	-34.352
3	-28.754	-22.406	-18.615	-13.935	-29.635	-28.157	-21.271	-17.969	-14.986	-29.466	-28.69	-21.102	-17.302	-14.228	-35.701	-33.233	-36.621	-34.726	-34.089	-36.295	-33.477	-33.764	-32.687	-33.238	-33.861	-34.944	-34.636	-33.573
4	-28.779	-22.287	-17.437	-15.517	-30.865	-28.541	-21.421	-18.117	-14.047	-29.003	-28.947	-21.369	-18.12	-13.963	-36.56	-34.226	-34.078	-34.13	-36.239	-36.499	-34.932	-33.039	-34.204	-34.124	-36.562	-32.357	-34.12	-33.714
5	-28.765	-21.485	-18.117	-14.197	-30.768	-28.188	-22.76	-17.896	-14.314	-29.034	-28.545	-22.292	-17.185	-15.844	-33.067	-34.252	-34.22	-33.352	-36.407	-35.696	-34.481	-36.976	-35.729	-33.198	-36.454	-34.745	-34.036	-34.445
6	-28.126	-22.742	-18.752	-13.658	-31.22	-28.639	-22.808	-18.586	-14.386	-30.652	-28.613	-21.008	-18.479	-14.113	-33.436	-34.155	-35.808	-36.276	-33.361	-34.56	-34.71	-35.746	-36.099	-32.691	-34.683	-34.197	-34.474	-33.415
7	-28.786	-22.346	-18.768	-13.495	-29.222	-28.332	-21.704	-17.395	-14.431	-31.585	-28.501	-21.297	-18.673	-14.434	-34.181	-34.214	-33.687	-33.391	-33.402	-34.986	-36.641	-34.093	-36.34	-34.367	-33.615	-35.559	-35.954	-35.605
8	-28.958	-21.946	-18.039	-15.393	-30.556	-28.59	-21.744	-18.61	-15.229	-29.134	-28.836	-22.668	-18.492	-14.239	-36.04	-33.667	-34.223	-34.624	-34.678	-33.344	-36.834	-34.885	-36.727	-33.293	-34.907	-34.719	-32.612	-35.136
9	-28.514	-21.982	-17.968	-15.563	-31.283	-28.559	-22.464	-17.443	-15.413	-31.1	-28.152	-22.593	-18.803	-14.066	-34.619	-34.017	-35.183	-34.693	-34.866	-35.673	-34.512	-34.347	-36.206	-35.912	-36.359	-34.942	-33.389	-35.997
10	-28.107	-21.604	-17.475	-13.348	-31.639	-28.516	-21.242	-17.378	-14.799	-30.874	-28.974	-21.855	-17.764	-13.563	-33.608	-33.915	-36.881	-34.945	-35.932	-34.191	-35.88	-34.249	-36.657	-34.271	-34.281	-34.937	-36.234	-32.319

TEST ITEM:	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, 6	
PIN NO/ FRE.:																							
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	1mA
MAX SPEC:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																							
AVERAGE =	-34.86	-34.13	-35.25	-34.45	-34.09	-34.65	-34.57	-35.77	-35.10	-35.02	-34.78	-35.19	-34.87	-33.91	-34.42	-34.54	-35.13	-35.00	-35.06	-34.62	-34.36		
STD DEV =	1.14	1.03	1.26	1.00	0.95	0.92	1.07	1.10	0.98	1.24	1.11	1.01	1.11	0.94	0.91	0.99	1.22	1.00	0.99	1.01	1.07		
Cpu	1.42	1.34	1.39	1.48	1.43	1.68	1.42	1.74	1.74	1.35	1.44	1.72	1.47	1.39	1.63	1.53	1.40	1.67	1.70	1.52	1.35		
Cpl																							
Cpk	1.42	1.34	1.39	1.48	1.43	1.68	1.42	1.74	1.74	1.35	1.44	1.72	1.47	1.39	1.63	1.53	1.40	1.67	1.70	1.52	1.35		
DATA																							
1	-34.162	-33.912	-35.459	-34.665	-33.441	-34.29	-34.374	-35.9	-34.367	-35.103	-34.771	-36.386	-36.916	-33.294	-35.117	-36.31	-33.041	-34.092	-34.561	-33.136	-35.914	PASS	
2	-34.061	-34.314	-34.939	-34.099	-35.576	-34.922	-33.502	-35.051	-34.233	-34.314	-35.944	-36.2	-36.906	-32.623	-34.387	-35.97	-34.274	-34.85	-35.22	-34.682	-35.134	PASS	
3	-36.413	-34.964	-32.673	-34.545	-33.648	-34.436	-36.118	-33.033	-35.928	-33.568	-32.815	-35.144	-34.821	-34.781	-34.074	-34.923	-35.784	-33.227	-34.861	-36.794	-35.33	PASS	
4	-36.821	-33.299	-33.968	-34.367	-34.587	-34.462	-33.566	-35.668	-34.646	-36.543	-34.079	-34.734	-33.896	-33.264	-34.096	-34.292	-36.553	-34.411	-33.281	-34.087	-34.402	PASS	
5	-35.412	-33.55	-36.457	-34.121	-34.374	-34.427	-34.565	-36.486	-33.617	-36.798	-34.366	-34.748	-35.268	-35.679	-34.403	-32.997	-33.887	-36.102	-34.366	-34.696	-33.225	PASS	
6	-33.283	-33.059	-34.01	-35.859	-34.245	-34.681	-36.955	-36.975	-36.317	-35.763	-35.708	-33.298	-33.786	-33.664	-34.776	-33.911	-34.058	-36.645	-35.079	-35.229	-33.221	PASS	
7	-35.307	-36.756	-35.911	-36.478	-34.094	-34.351	-34.29	-36.597	-34.719	-36.063	-34.972	-34.235	-34.164	-33.294	-32.899	-35.157	-36.268	-35.57	-36.742	-33.597	-35.213	PASS	
8	-33.237	-34.301	-35.909	-33.039	-35.348	-36.42	-34.583	-36.935	-34.497	-35.222	-33.2	-34.739	-34.069	-34.219	-34.702	-33.925	-34.747	-34.339	-34.75	-35.673	-32.314	PASS	
9	-34.812	-33.699	-36.772	-33.207	-33.519	-32.747	-33.558	-35.531	-36.54	-33.761	-36.14	-35.753	-34.229	-33.174	-33.387	-33.741	-36.745	-35.942	-36.778	-34.028	-34.218	PASS	
10	-35.097	-33.43	-36.359	-34.083	-32.082	-35.794	-34.171	-35.517	-36.173	-33.037	-35.846	-36.696	-34.648	-35.104	-36.398	-34.15	-35.93	-34.83	-34.971	-34.233	-34.603	PASS	

**Appendix 7**  
**JXD0-0001XNL 0hr electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22),(23)	(26),(24)	(25),(27),(28)	(21),(23)	(21),(24)	(21),(27),(23)	(24),(23)	(27),(24)	(27),(24)	(21,22),(9),(10),(11)	(10),(11)	
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000
MIN SPEC:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10
AVERAGE =	0.28	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.85	0.86	0.86	0.86	150.10	149.50	149.30	151.10	149.80	150.00	9988.80	9975.60
STD DEV =	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	2.66	2.87	2.24	3.08	1.99	2.61	33.60	73.20
Cpu	29.96	32.22	28.99	33.19	33.62	35.43	30.81	51.18	18.20	9.92	10.56	9.20	1.87	1.80	2.34	1.50	2.55	1.92	49.71	22.88
Cpl	10.03	10.84	9.74	11.20	11.05	11.76	10.12	16.71	23.22	13.65	14.29	12.41	1.89	1.68	2.13	1.74	2.48	1.92	99.00	45.38
Cpk	10.03	10.84	9.74	11.20	11.05	11.76	10.12	16.71	18.20	9.92	10.56	9.20	1.87	1.68	2.13	1.50	2.48	1.92	49.71	22.88
DATA	-----																			
11	0.285	0.268	0.284	0.282	0.281	0.271	0.265	0.272	0.854	0.878	0.855	0.849	146	147	145	153	151	153	10000	10000
12	0.270	0.273	0.282	0.267	0.273	0.273	0.273	0.273	0.853	0.875	0.859	0.877	147	152	150	149	148	152	10000	10000
13	0.283	0.276	0.280	0.275	0.281	0.267	0.279	0.278	0.859	0.864	0.866	0.853	150	145	152	155	146	150	10000	10000
14	0.271	0.266	0.268	0.280	0.276	0.277	0.271	0.273	0.840	0.849	0.846	0.845	153	149	152	154	151	145	9888	10000
15	0.283	0.279	0.283	0.278	0.270	0.271	0.272	0.273	0.855	0.849	0.874	0.844	152	148	151	146	152	146	10000	10000
16	0.268	0.277	0.277	0.271	0.266	0.270	0.281	0.267	0.844	0.869	0.868	0.878	152	150	149	146	149	153	10000	9756
17	0.273	0.277	0.274	0.280	0.265	0.281	0.267	0.275	0.852	0.854	0.848	0.870	153	148	150	152	150	150	10000	10000
18	0.277	0.282	0.268	0.280	0.272	0.275	0.269	0.275	0.841	0.879	0.845	0.865	152	153	148	152	148	152	10000	10000
19	0.271	0.281	0.268	0.270	0.276	0.276	0.283	0.266	0.843	0.864	0.863	0.849	150	148	146	150	153	150	10000	10000
20	0.274	0.283	0.277	0.283	0.271	0.284	0.271	0.271	0.844	0.851	0.876	0.864	146	155	150	154	150	149	10000	10000

TEST ITEM:	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1	RL2	
CONDITION:	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	
PIN NO/ FRE.:	2,3)/(21,224,5)/(23,266,7)/(24,258,9)/(27,28),(3),(21,2),(5),(23,2),(7),(24,2),(9),(27,221),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(1)																											
UNIT:	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-16.0
MIN SPEC:	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-16.0
AVERAGE =	1.00	1.00	1.00	1.00	0.24	0.24	0.23	0.25	484.20	473.20	470.90	492.10	1.03	-0.13	-0.74	-0.12	-0.68	-0.12	-0.69	-0.13	-0.69	-30.47	-28.57	-22.35	-18.00	-14.55	-30.50	
STD DEV =	0.00	0.00	0.00	0.00	0.03	0.04	0.04	0.02	31.07	27.98	29.81	31.15	0.04	0.01	0.06	0.01	0.05	0.01	0.05	0.01	0.06	0.74	0.29	0.46	0.64	0.72	0.92	
Cpu	10.05	11.56	11.78	8.39	8.45	6.62	7.23	14.27	26.99	30.10	28.28	26.84	2.05									6.54	14.67	7.54	4.20	3.02	5.27	
Cpl	9.00	10.67	10.44	7.66	2.60	1.99	2.11	4.51	1.44	1.47	1.35	1.52	2.51	30.34	1.46	28.04	2.33	31.61	1.91	35.27	1.82	6.54	14.67	7.54	4.20	3.02	5.27	
Cpk	9.00	10.67	10.44	7.66	2.60	1.99	2.11	4.51	1.44	1.47	1.35	1.52	2.05	30.34	1.46	28.04	2.33	31.61	1.91	35.27	1.82	6.54	14.67	7.54	4.20	3.02	5.27	
DATA																												
11	0.999	1	1	1	0.282	0.21	0.184	0.264	474	431	457	463	1.05	-0.138	-0.762	-0.114	-0.689	-0.131	-0.608	-0.112	-0.679	-30.8	-28.54	-22.89	-17.37	-15.4	-29.25	
12	1	0.999	0.999	0.999	0.24	0.19	0.232	0.244	479	478	488	507	0.97	-0.117	-0.774	-0.139	-0.616	-0.12	-0.698	-0.125	-0.764	-31.96	-28.89	-21.9	-18.14	-14.31	-31.9	
13	0.998	0.999	0.999	1	0.201	0.282	0.25	0.248	433	507	462	542	1.09	-0.138	-0.772	-0.135	-0.65	-0.119	-0.707	-0.132	-0.785	-29.13	-28	-22.37	-17.98	-13.82	-30.88	
14	0.998	0.999	0.999	0.999	0.203	0.182	0.189	0.226	472	502	499	512	0.96	-0.127	-0.632	-0.121	-0.713	-0.134	-0.634	-0.119	-0.66	-30.53	-28.85	-22.07	-17.03	-16	-31.58	
15	0.999	0.999	0.999	0.999	0.243	0.267	0.282	0.259	494	516	467	463	1.02	-0.128	-0.775	-0.116	-0.608	-0.135	-0.698	-0.132	-0.713	-30.1	-28.24	-22.04	-17.85	-14.48	-31.12	
16	0.999	1	0.998	0.998	0.255	0.222	0.279	0.243	488	450	527	463	1.06	-0.113	-0.62	-0.111	-0.699	-0.126	-0.607	-0.134	-0.719	-31.01	-28.65	-22.4	-18.49	-14.1	-30.82	
17	0.999	0.999	0.999	0.998	0.207	0.29	0.25	0.27	532	442	498	506	0.98	-0.121	-0.723	-0.121	-0.663	-0.114	-0.753	-0.135	-0.605	-29.87	-28.8	-22.43	-18.84	-14.48	-29.31	
18	0.999	0.999	0.999	1	0.248	0.255	0.251	0.222	454	481	433	500	1.07	-0.119	-0.787	-0.112	-0.764	-0.137	-0.72	-0.131	-0.697	-31.03	-28.27	-21.5	-18.89	-15.26	-30.23	
19	1	1	0.998	0.998	0.259	0.278	0.237	0.273	542	448	430	525	1.03	-0.113	-0.772	-0.136	-0.673	-0.114	-0.738	-0.117	-0.636	-30.27	-28.68	-22.9	-18.32	-13.67	-30.67	
20	0.998	0.998	0.998	1	0.291	0.209	0.181	0.228	474	477	448	440	1.07	-0.138	-0.784	-0.134	-0.724	-0.111	-0.758	-0.115	-0.615	-30.05	-28.76	-22.98	-17.09	-13.98	-29.24	

TEST ITEM:	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3	CT3	CT3
CONDITION:	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz
PIN NO/ FRE.:																												
UNIT:	dB																											
MAX SPEC:	-16.0																											
MIN SPEC.:																												
AVERAGE =	-28.59	-22.04	-17.88	-14.64	-30.30	-28.38	-21.92	-17.82	-14.27	-30.55	-28.49	-22.29	-18.21	-14.57	-34.76	-35.39	-34.79	-34.86	-35.40	-34.37	-34.84	-34.08	-35.18	-35.18	-34.83	-35.00	-34.73	-33.67
STD DEV =	0.31	0.52	0.57	0.70	0.83	0.29	0.43	0.51	1.04	0.82	0.26	0.54	0.63	0.64	0.85	1.22	1.06	1.10	1.31	0.95	1.11	0.92	1.11	1.24	1.20	1.20	0.93	0.89
Cpu	13.52	6.43	4.61	3.18	5.73	14.03	7.66	5.09	2.01	5.91	15.86	6.37	4.34	3.40	1.86	1.48	1.51	1.47	1.38	1.53	1.45	1.48	1.55	1.40	1.34	1.39	1.69	1.38
Cpl																												
Cpk	13.52	6.43	4.61	3.18	5.73	14.03	7.66	5.09	2.01	5.91	15.86	6.37	4.34	3.40	1.86	1.48	1.51	1.47	1.38	1.53	1.45	1.48	1.55	1.40	1.34	1.39	1.69	1.38
DATA																												
11	-28.55	-21.43	-17.65	-14.68	-30.62	-28.17	-22.81	-17.37	-13.6	-30.62	-28.33	-21.19	-18.42	-14.59	-33.58	-35.13	-33.48	-32.97	-36.93	-33.16	-36.2	-35.24	-36.5	-35.99	-34.82	-34.39	-34.93	-33.56
12	-28.86	-22.69	-17.22	-14.57	-29.14	-28.26	-21.89	-17.54	-13.44	-30.41	-28.62	-23	-18.29	-15.08	-36.17	-34.13	-34.05	-36.33	-36.16	-34.72	-34.71	-33.39	-33.58	-36.78	-34.86	-33.58	-34.82	-33.54
13	-28.74	-21.97	-17.09	-14.13	-29.7	-28.05	-21.62	-17.95	-13.11	-30.88	-28.84	-22.72	-17.09	-13.77	-36.2	-34	-33.23	-33.53	-35.84	-34.33	-36.49	-33.19	-34.91	-34.92	-36.88	-33.91	-33.35	-33.4
14	-28.14	-22.3	-18.43	-15.43	-31.98	-28.02	-21.37	-18.07	-15.69	-31.63	-28.05	-22.41	-18.58	-15.58	-34.11	-33.47	-34.62	-35.03	-34.6	-34.8	-34.62	-33.36	-33.7	-36.33	-32.95	-36.68	-33.41	-33.49
15	-28.7	-22.89	-18.36	-15.19	-30.77	-28.99	-21.98	-17.46	-15.41	-31.78	-28.19	-22.2	-17.8	-13.97	-35.36	-36.31	-35.07	-34.46	-35.21	-33.09	-36.49	-33.93	-34.25	-36.26	-35.71	-34.86	-35.61	-35.19
16	-28.78	-21.18	-17.64	-14.21	-29.38	-28.48	-22.29	-17.8	-13.89	-29.13	-28.7	-22.21	-18.71	-15.64	-34.37	-36.24	-36.45	-36.59	-36.64	-35.28	-33.57	-33.93	-36.37	-33.01	-35.04	-35.96	-36.65	-32.3
17	-28.09	-21.69	-17.6	-15.37	-29.53	-28.27	-22.13	-17.44	-15.62	-29.79	-28.39	-22.71	-18.96	-14.64	-33.95	-36.86	-34.9	-34.5	-34.11	-32.76	-34.4	-33.49	-36.64	-36.19	-32.73	-36.2	-35.25	-33.01
18	-28.21	-22.22	-18.95	-14.48	-31.06	-28.57	-21.39	-18.72	-13.4	-30.07	-28.9	-21.77	-17.17	-13.84	-34.64	-36.39	-34.45	-35.94	-32.37	-34.93	-34.2	-33.77	-35.25	-34.46	-35.26	-36.59	-34.54	-35.41
19	-28.95	-21.69	-18.3	-15.31	-30.59	-28.74	-21.54	-17.14	-15.34	-31.35	-28.37	-21.87	-18.88	-14.17	-34.31	-34.56	-36.63	-34.67	-36.19	-35.44	-33.26	-34.22	-34.51	-33.73	-35.81	-34.6	-34.33	-33.51
20	-28.91	-22.38	-17.52	-13.07	-30.21	-28.28	-22.19	-18.66	-13.19	-29.88	-28.52	-22.87	-18.17	-14.39	-34.88	-36.84	-35.09	-34.56	-35.93	-35.25	-34.42	-36.26	-36.14	-34.1	-34.24	-33.29	-34.46	-33.34

TEST ITEM:	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, 1mA	
PIN NO/ FRE.:																							
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	1mA
MAX SPEC:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC:																							
AVERAGE =	-34.83	-34.33	-34.67	-34.84	-35.12	-34.49	-35.23	-34.99	-35.63	-34.90	-35.17	-34.76	-34.71	-34.89	-35.26	-34.73	-34.91	-34.22	-35.12	-35.14	-34.87		
STD DEV =	1.05	1.05	1.12	0.85	1.05	1.10	1.10	1.19	0.98	1.21	1.13	1.15	0.98	1.07	1.21	1.13	1.22	1.05	1.24	1.22	1.18		
Cpu	1.54	1.37	1.39	1.89	1.63	1.36	1.59	1.40	1.91	1.35	1.52	1.37	1.61	1.52	1.45	1.39	1.34	1.34	1.37	1.40	1.37		
Cpl																							
Cpk	1.54	1.37	1.39	1.89	1.63	1.36	1.59	1.40	1.91	1.35	1.52	1.37	1.61	1.52	1.45	1.39	1.34	1.34	1.37	1.40	1.37		
DATA																							
11	-34.6	-34.5	-33.1	-34.69	-34.32	-35.05	-34.05	-33.82	-34.59	-34.09	-34.61	-33.13	-33.52	-34.33	-33.65	-36.45	-34.73	-33	-34.92	-34.09	-36.45	PASS	
12	-35.13	-34.99	-34.06	-34.06	-36	-33.18	-33.58	-35.79	-36.66	-35.95	-34.13	-34.43	-34.67	-33.05	-36.79	-33.04	-36.42	-35.31	-36.91	-33.28	-34.54	PASS	
13	-34.44	-36.77	-33.89	-35.5	-35.5	-36.22	-36.47	-34.98	-34.17	-36.64	-33.86	-34.52	-35.47	-34.63	-34.47	-34.36	-33.36	-36.09	-35.34	-34.57	-36.98	PASS	
14	-33.67	-33.44	-34.53	-34.82	-36.15	-34.71	-36.25	-35.53	-34.56	-35.96	-36.48	-33.63	-36.34	-35.13	-34.54	-36.59	-34.12	-34.05	-33.57	-35.91	-33.32	PASS	
15	-33.27	-34.13	-35.6	-35.15	-33.87	-32.94	-34.71	-35.79	-36.8	-34.74	-36.91	-34.16	-33.19	-36.15	-36.31	-34.62	-35.34	-33.82	-33.33	-33.64	-34.8	PASS	
16	-34.32	-33.04	-34.06	-34.24	-35.59	-34.93	-34.74	-33.2	-36.14	-35.38	-36.39	-33.81	-34.76	-34.37	-36.97	-34.2	-34.7	-34.82	-34.29	-35.75	-35.34	PASS	
17	-36.15	-33.93	-36.04	-33.83	-36.23	-35.39	-35.03	-35.78	-36.51	-35.49	-36.26	-36.23	-33.78	-35.65	-34.09	-35.74	-36.16	-35.28	-34.68	-36.55	-35.47	PASS	
18	-34.17	-34.31	-34.95	-35.41	-33.56	-33.72	-36.83	-33.15	-36.34	-32.56	-34.8	-36.9	-34.74	-33.39	-36.66	-33.36	-36.95	-32.95	-36.73	-36.22	-34.13	PASS	
19	-36.56	-35.07	-33.62	-36.73	-33.81	-33.18	-34.27	-36.98	-34.54	-33.27	-34.23	-35.85	-34.63	-36.22	-34.2	-34.25	-33.15	-33.04	-36.81	-34.48	-33.03	PASS	
20	-36.04	-33.15	-36.86	-33.93	-36.21	-35.61	-36.41	-34.89	-35.95	-34.97	-34.03	-34.91	-36	-35.98	-34.92	-34.66	-34.22	-33.83	-34.62	-36.94	-34.63	PASS	

## Appendix 8

### JXD0-0001XNL After Pre-condition electrical test data.

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22),(23),(26),(24),(25),(27),(28),(21),(23),(21),(24),(21),(27),(23),(24),(23),(27),(24),(27),(1),(21,22,2(9),(10),(											
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M
MAX SPEC.:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10
AVERAGE =	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.86	0.86	0.87	0.86	149.60	149.70	149.80	149.80	150.00	150.40	9983.30	9965.50
STD DEV =	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.58	2.37	2.36	2.14	2.79	2.80	50.10	103.50
Cpu	35.86	27.22	22.42	30.81	22.87	28.61	31.37	29.61	10.15	9.79	13.48	8.19	1.99	2.15	2.15	2.37	1.79	1.74	33.38	16.21
Cpl	12.16	9.30	7.74	10.73	7.70	9.60	10.61	10.08	13.97	13.15	18.75	11.14	1.89	2.07	2.09	2.31	1.79	1.83	66.36	32.06
Cpk	12.16	9.30	7.74	10.73	7.70	9.60	10.61	10.08	10.15	9.79	13.48	8.19	1.89	2.07	2.09	2.31	1.79	1.74	33.38	16.21
DATA	-----																			
11	0.281	0.279	0.286	0.279	0.274	0.277	0.280	0.277	0.869	0.854	0.849	0.877	149	147	148	152	148	150	10000	10000
12	0.281	0.282	0.282	0.284	0.290	0.276	0.280	0.267	0.850	0.854	0.876	0.854	152	149	149	150	145	146	10000	10000
13	0.275	0.269	0.267	0.288	0.274	0.274	0.284	0.281	0.848	0.859	0.862	0.876	154	149	148	150	153	153	10000	10000
14	0.274	0.285	0.285	0.277	0.285	0.287	0.274	0.285	0.851	0.841	0.862	0.849	150	150	151	150	152	152	10000	10000
15	0.285	0.267	0.289	0.289	0.269	0.269	0.267	0.280	0.871	0.851	0.873	0.879	147	147	151	152	153	152	10000	10000
16	0.276	0.274	0.271	0.271	0.285	0.282	0.276	0.280	0.879	0.871	0.877	0.868	149	149	148	152	148	147	10000	10000
17	0.270	0.278	0.281	0.287	0.275	0.270	0.276	0.279	0.853	0.856	0.868	0.848	151	155	146	149	153	150	10000	10000
18	0.282	0.283	0.283	0.276	0.268	0.281	0.276	0.267	0.869	0.847	0.858	0.842	152	149	153	146	147	155	10000	10000
19	0.270	0.278	0.267	0.279	0.266	0.277	0.286	0.278	0.868	0.875	0.868	0.846	146	149	150	146	149	152	10000	9655
20	0.279	0.288	0.285	0.278	0.278	0.266	0.270	0.284	0.876	0.878	0.861	0.871	146	153	154	151	152	147	9833	10000



TEST ITEM:	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1	RL2	
CONDITION:	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100m	100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	100m100kHz, 100m	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz
PIN NO/ FRE.:	2,3)/(21,224,5)/(23,26,7)/(24,26,8,9)/(27,28),(3),(21,2),(5),(23,2),(7),(24,2),(9),(27,221),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(1)																											
UNIT:	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC.:	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3	-1	-1	-1	-1	-1	-1	-1	-1	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	
MIN SPEC.:	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-30.83	-28.60	-22.19	-17.92	-14.60	-30.36	
AVERAGE =	1.00	1.00	1.00	1.00	0.24	0.23	0.23	0.25	491.10	476.50	499.50	480.50	1.02	-0.12	-0.68	-0.13	-0.71	-0.13	-0.71	-0.13	-0.71	-30.83	-28.60	-22.19	-17.92	-14.60	-30.36	
STD DEV =	0.00	0.00	0.00	0.00	0.04	0.04	0.02	0.03	32.28	31.51	23.51	28.85	0.04	0.01	0.05	0.01	0.06	0.01	0.06	0.01	0.05	5.71	17.90	6.95	4.93	2.80	0.89	
Cpu	11.07	15.49	8.47	8.47	6.03	6.75	13.06	7.60	25.90	26.70	35.45	29.11	2.20									5.71	17.90	6.95	4.93	2.80	5.39	
Cpl	10.01	13.60	7.58	7.58	1.86	1.98	3.80	2.37	1.46	1.34	2.12	1.51	2.46	30.55	2.29	32.38	1.58	37.27	1.64	32.59	1.89	5.71	17.90	6.95	4.93	2.80	5.39	
Cpk	10.01	13.60	7.58	7.58	1.86	1.98	3.80	2.37	1.46	1.34	2.12	1.51	2.20	30.55	2.29	32.38	1.58	37.27	1.64	32.59	1.89	5.71	17.90	6.95	4.93	2.80	5.39	
DATA																												
11	1	0.999	1	0.999	0.292	0.237	0.246	0.224	484	482	462	479	1.01	-0.136	-0.713	-0.115	-0.797	-0.115	-0.648	-0.111	-0.796	-31.156	-28.803	-21.511	-18.141	-13.394	-29.343	
12	0.999	0.999	0.999	0.998	0.249	0.198	0.249	0.209	504	502	485	476	0.97	-0.112	-0.722	-0.112	-0.612	-0.139	-0.625	-0.121	-0.691	-31.071	-28.451	-21.404	-17.53	-15.838	-31.743	
13	0.998	0.998	0.998	1	0.286	0.277	0.238	0.203	534	449	526	464	1.07	-0.113	-0.619	-0.113	-0.699	-0.133	-0.769	-0.114	-0.7	-30.794	-28.227	-22.694	-17.971	-15.897	-30.238	
14	0.999	0.998	0.998	0.998	0.183	0.211	0.206	0.221	479	457	496	484	1.09	-0.112	-0.714	-0.132	-0.624	-0.135	-0.742	-0.14	-0.69	-31.808	-28.915	-22.105	-17.32	-14.606	-29.859	
15	0.999	0.999	1	0.999	0.183	0.185	0.27	0.289	451	435	513	529	1.06	-0.13	-0.737	-0.133	-0.793	-0.129	-0.672	-0.138	-0.727	-29.401	-28.771	-22.843	-17.098	-14.316	-29.544	
16	0.999	0.999	0.999	0.998	0.283	0.194	0.214	0.249	480	471	501	524	0.99	-0.114	-0.719	-0.127	-0.696	-0.127	-0.621	-0.131	-0.775	-31.751	-28.545	-22.706	-18.447	-14.342	-29.06	
17	1	0.999	0.998	0.999	0.218	0.258	0.23	0.298	434	449	542	493	1.03	-0.115	-0.679	-0.127	-0.781	-0.127	-0.712	-0.125	-0.769	-29.984	-28.886	-22.354	-18.885	-15.292	-30.677	
18	0.998	0.998	0.998	1	0.206	0.282	0.236	0.262	543	541	466	439	0.99	-0.125	-0.614	-0.135	-0.702	-0.14	-0.798	-0.132	-0.671	-29.434	-28.544	-22.351	-17.516	-14.348	-30.552	
19	0.999	0.999	1	0.998	0.244	0.291	0.204	0.279	488	513	508	480	1.01	-0.136	-0.611	-0.138	-0.694	-0.126	-0.752	-0.128	-0.666	-31.571	-28.637	-21.647	-17.868	-13.961	-30.809	
20	0.999	0.999	0.999	1	0.292	0.212	0.241	0.219	514	466	496	437	0.95	-0.113	-0.679	-0.122	-0.709	-0.118	-0.74	-0.128	-0.632	-31.356	-28.239	-22.271	-18.418	-13.965	-31.763	

TEST ITEM:	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3	CT3	CT3
CONDITION:	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz
PIN NO/ FRE.:																												
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC.:	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																												
AVERAGE =	-28.68	-22.04	-17.68	-14.49	-30.94	-28.52	-21.76	-18.56	-14.46	-30.76	-28.56	-22.00	-18.14	-14.77	-34.58	-35.14	-34.69	-35.12	-34.69	-35.14	-34.66	-34.81	-35.59	-35.35	-35.19	-34.90	-34.55	-35.46
STD DEV =	0.30	0.70	0.57	0.78	0.71	0.36	0.60	0.38	0.78	0.93	0.29	0.53	0.59	0.99	0.96	1.17	1.09	1.08	1.07	1.07	1.09	1.06	1.31	1.33	1.26	0.92	1.13	0.87
Cpu	14.05	4.79	4.47	2.75	7.01	11.49	5.46	7.48	2.77	5.27	14.49	6.23	4.62	2.28	1.59	1.47	1.44	1.58	1.46	1.60	1.43	1.51	1.42	1.34	1.37	1.78	1.34	2.10
Cpl																												
Cpk	14.05	4.79	4.47	2.75	7.01	11.49	5.46	7.48	2.77	5.27	14.49	6.23	4.62	2.28	1.59	1.47	1.44	1.58	1.46	1.60	1.43	1.51	1.42	1.34	1.37	1.78	1.34	2.10
DATA																												
11	-28.069	-22.244	-17.462	-13.291	-31.065	-28.074	-22.633	-18.87	-14.449	-31.302	-28.546	-21.231	-18.852	-13.369	-35.211	-34.205	-34.84	-33.328	-35.148	-36.004	-34.104	-34.697	-36.48	-36.119	-36.419	-34.259	-34.104	-34.894
12	-28.954	-21.044	-17.563	-14.296	-31.748	-28.23	-22.597	-18.183	-13.413	-31.646	-28.911	-21.309	-17.35	-15.806	-34.831	-35.165	-35.504	-36.754	-34.23	-35.895	-33.636	-33.668	-36.332	-35.101	-36.877	-34.411	-34.204	-36.392
13	-28.654	-22.573	-18.707	-15.243	-31.582	-28.966	-22.574	-18.925	-13.621	-31.412	-28.14	-21.872	-18.518	-13.574	-34.739	-33.857	-33.013	-34.075	-33.846	-34.032	-34.338	-36.018	-33.518	-36.64	-33.44	-36.517	-36.776	-36.248
14	-28.68	-21.795	-17.279	-14.786	-30.231	-28.608	-21.702	-18.165	-15.568	-29.082	-28.353	-22.946	-17.966	-15.965	-35.699	-34.702	-35.088	-36.548	-33.258	-35.583	-35.981	-34.433	-36.634	-34.087	-32.831	-34.771	-33.984	-36.233
15	-28.307	-22.552	-17.721	-13.763	-29.752	-28.738	-21.188	-18.409	-14.289	-30.019	-28.925	-21.664	-17.031	-15.944	-33.28	-36.35	-34.936	-35.269	-34.401	-35.475	-35.359	-33.555	-35.428	-36.986	-36.158	-33.253	-34.033	-35.045
16	-28.998	-21.158	-18.55	-14.413	-29.755	-28.026	-21.866	-18.972	-14.701	-29.183	-28.991	-22.447	-18.257	-13.491	-36.282	-36.443	-36.387	-34.42	-36.268	-36.138	-34.99	-33.671	-33.792	-35.826	-34.709	-34.098	-34.447	-35.71
17	-28.799	-22.291	-18.203	-15.837	-31.281	-28.919	-21.222	-18.795	-14.679	-31.391	-28.649	-22.719	-18.517	-14.523	-34.138	-33.64	-35.534	-35.045	-34.975	-34.733	-35.322	-36.548	-36.76	-36.772	-34.729	-36.058	-33.093	-35.05
18	-28.437	-22.854	-17.158	-14.54	-31.457	-28.952	-21.444	-18.942	-14.367	-31.147	-28.528	-21.873	-18.873	-14.332	-34.58	-34.024	-33.422	-35.474	-36.408	-32.989	-36.216	-36.247	-36.633	-34.259	-34.795	-35.244	-34.779	-33.546
19	-28.977	-22.862	-17.001	-15.247	-31.157	-28.555	-21.058	-17.833	-13.602	-30.786	-28.222	-22.09	-18.367	-15.444	-33.016	-36.105	-35.14	-36.167	-33.163	-36.445	-34.253	-34.232	-33.699	-35.165	-35.66	-35.467	-36.506	-35.092
20	-28.913	-21.011	-17.19	-13.439	-31.404	-28.085	-21.31	-18.481	-15.923	-31.654	-28.337	-21.834	-17.716	-15.216	-34.058	-36.956	-33.056	-34.161	-35.213	-34.093	-32.429	-35.053	-36.651	-32.591	-36.255	-34.934	-33.573	-36.426

TEST ITEM:	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, 500mA	
PIN NO/ FRE.:																							
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	1mA
MAX SPEC:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																							
AVERAGE =	-34.42	-34.98	-34.48	-34.78	-34.93	-34.26	-34.76	-35.10	-34.77	-34.76	-34.21	-34.25	-34.47	-34.30	-35.43	-34.26	-34.67	-35.02	-34.77	-34.64	-34.58		
STD DEV =	1.06	1.01	1.00	1.11	1.13	0.97	1.03	1.03	1.10	1.15	0.91	0.82	0.98	0.95	1.26	1.03	1.04	0.99	1.12	0.94	1.09		
Cpu	1.39	1.64	1.49	1.43	1.45	1.47	1.54	1.65	1.44	1.38	1.55	1.72	1.51	1.50	1.44	1.38	1.49	1.68	1.42	1.65	1.41		
Cpl																							
Cpk	1.39	1.64	1.49	1.43	1.45	1.47	1.54	1.65	1.44	1.38	1.55	1.72	1.51	1.50	1.44	1.38	1.49	1.68	1.42	1.65	1.41		
DATA																							
11	-34.291	-34.491	-34.456	-34.39	-33.712	-36.363	-33.222	-34.714	-33.097	-34.414	-32.539	-33.918	-33.797	-33.719	-36.806	-33.957	-34.355	-36.051	-36.168	-35.081	-34.682	PASS	
12	-33.038	-36.253	-35.265	-33.913	-36.974	-33.595	-32.597	-34.699	-34.507	-33.029	-33.968	-33.259	-35.442	-34.771	-33.767	-34.273	-35.519	-34.391	-32.154	-33.474	-33.151	PASS	
13	-33.685	-32.442	-33.859	-36.117	-34.961	-34.047	-35.664	-36.857	-34.431	-36.244	-34.424	-34.141	-33.778	-32.868	-36.981	-33.113	-34.963	-36.231	-35.527	-35.817	-34.511	PASS	
14	-34.47	-34.654	-33.162	-36.993	-33.371	-33.022	-34.864	-34.594	-36.079	-33.446	-34.813	-34.41	-34.414	-34.099	-35.693	-33.229	-34.596	-33.394	-34.325	-34.24	-33.879	PASS	
15	-33.442	-36.037	-33.671	-35.613	-36.674	-35.499	-35.757	-33.223	-36.774	-36.126	-35.933	-33.352	-35.369	-35.143	-33.974	-34.271	-34.947	-35.71	-34.481	-35.703	-36.302	PASS	
16	-36.356	-35.249	-36.358	-35.157	-35.487	-34.796	-34.943	-35.473	-34.392	-35.819	-33.605	-34.849	-33.746	-35.615	-36.495	-36.837	-32.359	-34.184	-34.276	-33.021	-36.855	PASS	
17	-33.921	-34.895	-34.617	-34.467	-35.157	-34.054	-34.756	-36.447	-35.765	-33.2	-34.341	-33.048	-34.149	-34.82	-34.032	-34.557	-34.589	-35.652	-36.242	-33.765	-33.87	PASS	
18	-33.802	-35.071	-33.083	-33.782	-34.748	-33.632	-35.166	-34.85	-34.222	-34.623	-33.203	-34.936	-34.384	-35.322	-34.132	-35.052	-36.207	-34.137	-35.365	-34.916	-34.114	PASS	
19	-35.042	-35.754	-34.832	-34.091	-34.031	-34.086	-34.628	-35.945	-33.381	-35.555	-34.351	-35.755	-36.568	-33.969	-36.723	-33.681	-33.533	-36.175	-34.812	-34.654	-34.523	PASS	
20	-36.163	-34.978	-35.478	-33.245	-34.192	-33.492	-35.996	-34.241	-35.034	-35.185	-34.952	-34.825	-33.071	-32.692	-35.702	-33.601	-35.606	-34.232	-34.391	-35.689	-33.951	PASS	

## Appendix 9

### Mating/Unmating force test data

<i>Mating/Unmating</i>		
TEST ITEM:	Insertion force	Withdrawal force
PIN NO:	RJ45	RJ45
UNIT:	kg	kg
11#	4.46	1.18
12#	4.35	1.80
13#	4.45	1.86
14#	4.13	1.48
15#	3.99	1.46
16#	4.28	1.72
17#	4.48	1.79
18#	4.07	1.82
19#	4.70	1.71
20#	4.39	1.72

### Appendix 10

#### JXD0-0001XNL After 100cycles Thermal Shock electrical test dat

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22)	(23),(26)	(24),(25)	(27),(28)	21,(23),(21)	(24),(21)	(27),(23)	(24),(23)	(27),(24)	(24),(27),(1)	(21,22,(9),(10),(	(10),(
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000
MIN SPEC:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10
AVERAGE =	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.87	0.85	0.85	0.86	148.90	150.30	147.80	148.60	151.00	151.00	9988.10	9956.80
STD DEV =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.17	3.20	2.93	3.35	3.10	2.05	35.70	129.60
Cpu	25.10	31.47	18.37	23.83	31.02	29.09	25.85	20.34	10.62	12.02	13.62	16.42	2.48	1.53	1.96	1.63	1.51	2.28	46.80	12.97
Cpl	8.38	10.84	6.16	8.17	10.87	10.12	8.55	6.94	14.96	15.57	17.77	22.56	2.14	1.60	1.46	1.35	1.72	2.60	93.17	25.58
Cpk	8.38	10.84	6.16	8.17	10.87	10.12	8.55	6.94	10.62	12.02	13.62	16.42	2.14	1.53	1.46	1.35	1.51	2.28	46.80	12.97
DATA	-----																			
11	0.287	0.285	0.272	0.290	0.287	0.283	0.284	0.290	0.874	0.853	0.847	0.869	152	154	146	154	155	153	10000	10000
12	0.279	0.272	0.287	0.282	0.283	0.281	0.270	0.268	0.877	0.847	0.851	0.856	149	153	145	146	147	146	9881	10000
13	0.277	0.282	0.270	0.288	0.284	0.287	0.283	0.279	0.876	0.863	0.863	0.851	147	149	149	151	147	150	10000	10000
14	0.267	0.288	0.269	0.276	0.288	0.280	0.268	0.282	0.876	0.854	0.864	0.866	151	145	146	146	146	153	10000	10000
15	0.279	0.281	0.268	0.266	0.276	0.282	0.280	0.285	0.860	0.873	0.852	0.874	150	151	150	145	154	152	10000	10000
16	0.265	0.281	0.285	0.268	0.290	0.274	0.268	0.283	0.866	0.848	0.868	0.860	151	148	145	146	152	152	10000	9568
17	0.275	0.281	0.287	0.280	0.278	0.271	0.265	0.266	0.870	0.852	0.849	0.863	149	152	155	146	153	150	10000	10000
18	0.284	0.280	0.266	0.278	0.273	0.287	0.270	0.288	0.877	0.841	0.846	0.871	145	153	146	147	150	153	10000	10000
19	0.270	0.273	0.265	0.277	0.275	0.273	0.271	0.266	0.843	0.844	0.846	0.857	146	145	149	151	153	151	10000	10000
20	0.269	0.270	0.290	0.283	0.282	0.289	0.281	0.275	0.860	0.840	0.842	0.863	149	153	147	154	153	150	10000	10000

TEST ITEM:	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	
CONDITION:	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz
PIN NO/ FRE:	3	21	5	23	7	24	21	9	27	2	21	22	23	26	24	25	27	28	23	24	25	26	27	28		
UNIT:	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
MIN SPEC:	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
AVERAGE =	1.00	1.00	1.00	1.00	0.23	0.24	0.23	0.25	498.50	483.80	502.10	479.70	1.03	-0.13	-0.70	-0.12	-0.71	-0.13	-0.70	-0.12	-0.69	-30.13	-28.41	-22.07	-18.07	
STD DEV =	0.00	0.00	0.00	0.00	0.04	0.03	0.04	0.03	30.63	28.92	32.54	30.76	0.05	0.01	0.05	0.01	0.06	0.01	0.06	0.01	0.05	1.02	0.20	0.60	0.42	
Cpu	11.07	10.35	14.02	10.05	7.22	8.37	6.32	7.57	27.22	29.01	25.59	27.31	1.85													
Cpl	10.01	9.75	13.20	9.00	2.12	2.50	1.80	2.38	1.62	1.54	1.56	1.41	2.29	31.99	2.07	34.37	1.56	28.93	1.64	33.06	1.94	4.62	21.16	5.60	6.43	
Cpk	10.01	9.75	13.20	9.00	2.12	2.50	1.80	2.38	1.62	1.54	1.56	1.41	1.85	31.99	2.07	34.37	1.56	28.93	1.64	33.06	1.94	4.62	21.16	5.60	6.43	
DATA																										
11	0.999	1	1	0.998	0.285	0.188	0.295	0.239	475	498	473	461	1.08	-0.123	-0.66	-0.112	-0.677	-0.126	-0.635	-0.138	-0.636	-31.97	-28.31	-21.81	-17.96	
12	0.999	0.999	1	0.999	0.25	0.217	0.291	0.268	532	526	493	481	1.05	-0.115	-0.699	-0.111	-0.787	-0.117	-0.627	-0.13	-0.611	-30.21	-28.42	-22.83	-18.66	
13	0.999	1	0.999	0.999	0.245	0.282	0.184	0.227	518	516	550	495	1.07	-0.115	-0.715	-0.128	-0.747	-0.137	-0.747	-0.117	-0.727	-29.46	-28.35	-22.83	-17.75	
14	0.998	1	0.999	0.998	0.238	0.273	0.201	0.261	528	487	489	451	0.96	-0.137	-0.696	-0.134	-0.603	-0.139	-0.625	-0.115	-0.774	-31.96	-28.48	-22.62	-17.79	
15	1	0.999	1	0.999	0.203	0.283	0.2	0.259	539	521	535	437	1.03	-0.138	-0.618	-0.132	-0.674	-0.137	-0.66	-0.134	-0.718	-29.15	-28.42	-22.15	-17.71	
16	0.999	0.998	0.999	1	0.193	0.214	0.28	0.195	461	469	494	474	1.07	-0.115	-0.715	-0.118	-0.727	-0.138	-0.788	-0.115	-0.745	-30.4	-28.12	-22.69	-18.93	
17	1	0.999	1	0.999	0.269	0.244	0.21	0.297	495	446	451	529	0.98	-0.12	-0.791	-0.124	-0.765	-0.13	-0.65	-0.114	-0.704	-29.04	-28.3	-21.66	-18.29	
18	0.999	1	0.999	1	0.19	0.227	0.218	0.212	444	465	520	523	0.96	-0.135	-0.638	-0.116	-0.714	-0.113	-0.781	-0.12	-0.712	-30.09	-28.29	-21.45	-17.98	
19	0.998	1	0.999	0.999	0.192	0.224	0.228	0.215	482	467	547	503	1.02	-0.134	-0.69	-0.135	-0.638	-0.123	-0.744	-0.124	-0.614	-29.75	-28.56	-21.27	-17.55	
20	0.999	0.999	0.999	0.998	0.278	0.225	0.189	0.295	511	443	469	443	1.1	-0.122	-0.752	-0.127	-0.8	-0.112	-0.714	-0.135	-0.681	-29.22	-28.89	-21.38	-18.07	

TEST ITEM:	RL1	RL2	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	
PIN NO/ FRE.:																												
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC:																												
AVERAGE =	-15.00	-30.69	-28.54	-21.81	-17.78	-14.56	-30.99	-28.37	-22.12	-18.23	-14.48	-30.47	-28.56	-21.91	-17.95	-14.54	-34.92	-35.06	-34.70	-35.12	-35.25	-34.63	-34.95	-34.73	-35.22	-35.18	-35.01	
STD DEV =	0.97	0.91	0.31	0.62	0.55	0.75	0.81	0.26	0.56	0.49	0.86	0.62	0.28	0.59	0.69	0.94	1.13	1.19	1.10	1.25	0.90	1.03	1.07	1.06	1.12	1.23	1.06	
Cpu	2.41	5.41	13.57	5.28	4.73	2.90	6.20	15.99	6.02	5.57	2.50	7.74	15.07	5.62	3.86	2.32	1.46	1.41	1.42	1.37	1.95	1.50	1.54	1.48	1.56	1.41	1.58	
Cpl																												
Cpk	2.41	5.41	13.57	5.28	4.73	2.90	6.20	15.99	6.02	5.57	2.50	7.74	15.07	5.62	3.86	2.32	1.46	1.41	1.42	1.37	1.95	1.50	1.54	1.48	1.56	1.41	1.58	
DATA																												
11	-15.96	-30.71	-28.18	-22.63	-18.32	-15.76	-29.32	-28.46	-22.13	-18	-13.85	-30.7	-28.29	-22.05	-18.09	-15.53	-35.02	-35.64	-34.6	-36.12	-36.58	-36.27	-36.64	-33.03	-36.92	-35.67	-34.08	
12	-14.68	-31.55	-28.87	-21.16	-18.5	-15.02	-31.99	-28.32	-22.85	-18.08	-14.27	-30.59	-28.56	-21.24	-18.66	-15.7	-33.55	-36.05	-34.07	-35.06	-35.62	-35.83	-34.17	-33.45	-33.07	-34.12	-36.44	
13	-15.69	-31.68	-28.08	-22.14	-17.95	-15.71	-31.39	-28.8	-22.44	-18.48	-13.77	-30.05	-28.88	-22.76	-17.25	-13.45	-34.41	-34.74	-35.55	-36.44	-34.66	-35.84	-36.02	-36.84	-34.46	-36.72	-33.49	
14	-15.64	-31.33	-28.22	-21.01	-17.38	-14.76	-30.82	-28.58	-21.31	-18.52	-15.51	-31.55	-28.84	-21.18	-17.21	-13.08	-35.85	-33.26	-34.44	-36.45	-33.59	-34.48	-35.84	-35.1	-34.34	-33.88	-35.45	
15	-15.6	-29.62	-28.85	-21.57	-17.34	-13.96	-29.99	-28.35	-22.97	-18.88	-15.6	-29.73	-28.65	-21.43	-17.21	-14.44	-36.84	-34.69	-34.24	-33.92	-35.68	-33.79	-34.61	-33.62	-34.68	-36.89	-35.97	
16	-15.99	-29.24	-28.98	-21.62	-17.34	-14.39	-31.53	-28.73	-22.09	-17.04	-14.81	-30.19	-28.21	-21.42	-18.03	-14.96	-35.27	-33.41	-35.74	-35.73	-34.48	-34.38	-35.8	-35.26	-34.58	-35.47	-35.25	
17	-14.29	-30.24	-28.82	-21.62	-18.82	-13.87	-31.54	-28.21	-21.93	-17.99	-15.31	-30.27	-28.72	-22.76	-18.63	-14.12	-34.61	-36.5	-36.07	-34.95	-34.68	-33.39	-34.99	-35.24	-36.46	-34.27	-34.83	
18	-13.02	-31.8	-28.53	-21.19	-17.28	-13.85	-30.41	-28.09	-22.52	-18.12	-13.07	-29.56	-28.92	-22.42	-18.45	-15.81	-34.6	-33.77	-35.66	-34.03	-35.8	-34.08	-34.7	-35.26	-35.8	-33.83	-35.83	
19	-15.41	-31.14	-28.46	-22.23	-17.54	-13.44	-31.16	-28.1	-21.2	-18.43	-15.14	-30.68	-28.09	-21.58	-18.96	-13.48	-32.9	-36.21	-34.54	-32.45	-34.9	-35.11	-33.72	-34.98	-35.94	-36.84	-35.64	
20	-13.76	-29.6	-28.41	-22.95	-17.3	-14.8	-31.74	-28.03	-21.81	-18.72	-13.49	-31.44	-28.44	-22.31	-17.01	-14.87	-36.18	-36.37	-32.09	-36.08	-36.46	-33.16	-33.02	-34.48	-35.92	-34.1	-33.1	

TEST ITEM:	CT3	CT3	CT3	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, 6	
PIN NO/ FRE.:																										
UNIT:	dB																									
MAX SPEC:	-30.0																									
MIN SPEC:																										
AVERAGE =	-34.43	-34.22	-34.42	-34.52	-34.91	-34.72	-34.73	-35.11	-34.98	-34.63	-35.13	-35.03	-34.89	-35.08	-35.42	-35.43	-34.88	-34.52	-35.46	-34.46	-34.45	-34.34	-34.92	-35.29		
STD DEV =	0.96	0.92	0.93	0.97	1.07	1.17	1.11	1.23	1.12	1.14	1.11	1.15	0.96	1.07	1.35	1.31	0.72	1.05	1.15	0.95	1.06	1.02	1.15	1.14		
Cpu	1.54	1.52	1.59	1.55	1.54	1.35	1.42	1.38	1.47	1.36	1.54	1.46	1.69	1.58	1.34	1.39	2.25	1.43	1.59	1.56	1.40	1.42	1.43	1.54		
Cpl																										
Cpk	1.54	1.52	1.59	1.55	1.54	1.35	1.42	1.38	1.47	1.36	1.54	1.46	1.69	1.58	1.34	1.39	2.25	1.43	1.59	1.56	1.40	1.42	1.43	1.54		
DATA																										
11	-34.87	-34.28	-35.65	-33.59	-34.43	-34.91	-33.27	-33.04	-35.27	-32.78	-34.42	-33.26	-33.95	-35.94	-32.15	-32.88	-34.41	-33.76	-34.31	-34.08	-33.05	-34.02	-32.7	-34.85	PASS	
12	-35.53	-34.34	-34.05	-34.47	-36.11	-34.54	-34.46	-36.33	-35.52	-34.41	-36.46	-35.75	-35.58	-34.35	-36.26	-35.87	-35.61	-33.22	-36.75	-34.01	-33.24	-32.89	-35.64	-34.01	PASS	
13	-35.49	-34.08	-34.45	-33.92	-33.17	-35.94	-33.91	-33.14	-33.15	-33.86	-36.82	-35.3	-36.84	-33.78	-35.18	-35.29	-34.06	-34.56	-36.68	-36.42	-35.53	-35.74	-34.07	-36.22	PASS	
14	-33.87	-36.07	-33.92	-34.58	-35.03	-34.18	-33.45	-34.58	-36.39	-36.95	-34.94	-36.33	-33.7	-34.76	-36.46	-34.36	-35.37	-36.95	-34.07	-34.5	-36.11	-34.7	-33.68	-33.67	PASS	
15	-32.73	-33.57	-34.33	-33.91	-34.47	-33.78	-35.85	-34.85	-34.45	-35.77	-34.32	-33.28	-34.07	-36.44	-36.37	-36.96	-34.96	-33.11	-35.32	-33.27	-33.54	-33.59	-35.88	-36.4	PASS	
16	-35.04	-35.71	-33.9	-36.51	-36.57	-36.88	-34.34	-36.63	-35.02	-34.9	-33.77	-36.04	-35.39	-36.58	-36	-36.51	-33.95	-35.02	-36.58	-34.95	-35.2	-34.29	-35.54	-34.68	PASS	
17	-35.16	-33.54	-35.59	-34.49	-36.35	-33.06	-34.65	-34.52	-33.25	-34.15	-34.5	-34.58	-35.88	-35.55	-34.86	-36.76	-36.47	-34.15	-35.28	-34.56	-33.89	-32.81	-36.03	-36.69	PASS	
18	-33.57	-33.44	-34.08	-33.67	-34.95	-35.43	-36.93	-35.99	-36.34	-33.52	-34.25	-34.17	-34.32	-33.09	-34.05	-34.84	-34.77	-35.14	-35.8	-33.61	-35.83	-34.56	-36.44	-36.82	PASS	
19	-33.18	-33.06	-32.58	-36.18	-33.98	-33.11	-34.5	-35.73	-36.12	-34.53	-36.99	-36.69	-34.21	-35.4	-36.61	-34.08	-34.56	-34.49	-36.43	-33.47	-34.06	-36.08	-35.05	-35.55	PASS	
20	-34.88	-34.1	-35.65	-33.91	-34.05	-35.38	-35.92	-36.3	-34.27	-35.42	-34.83	-34.94	-35.02	-34.94	-36.31	-36.75	-34.64	-34.83	-33.37	-35.69	-34.05	-34.68	-34.14	-33.97	PASS	



**Appendix 14**  
**JXD0-0001XNL 0hr electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(	3),(1),(	4),(1),(	5),(1),(	6),(1),(	7),(1),(	8),(1)	9),(1)	(21),(22,(23),(26)	(24),(25)	(27),(28)	21),(23),(21),(24),(21),(27),(23),(24),(23),(27),(24),(27),(1),(21,22,(9),(10),(								
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M	M
MAX SPEC.:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10	10
AVERAGE =	0.28	0.27	0.28	0.28	0.27	0.27	0.28	0.28	0.86	0.86	0.86	0.86	151.20	148.30	150.60	149.90	149.80	150.30	9989.60	9988.80
STD DEV =	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	2.48	2.24	2.50	1.92	3.25	3.07	31.20	33.60
Cpu	30.38	25.63	28.74	24.62	28.60	38.21	25.98	33.65	8.90	11.53	9.22	9.29	1.85	2.49	1.92	2.62	1.56	1.60	53.53	49.71
Cpl	10.23	8.49	9.64	8.26	9.43	12.36	8.73	11.29	11.78	15.71	12.65	12.41	2.18	1.98	2.08	2.59	1.52	1.66	106.62	99.00
Cpk	10.23	8.49	9.64	8.26	9.43	12.36	8.73	11.29	8.90	11.53	9.22	9.29	1.85	1.98	1.92	2.59	1.52	1.60	53.53	49.71
DATA																				
21	0.278	0.273	0.284	0.282	0.285	0.265	0.266	0.276	0.865	0.860	0.844	0.873	151	153	150	150	153	147	10000	10000
22	0.284	0.270	0.282	0.284	0.267	0.278	0.283	0.277	0.866	0.863	0.846	0.878	152	146	152	151	146	153	10000	10000
23	0.285	0.283	0.279	0.265	0.265	0.269	0.280	0.285	0.840	0.861	0.879	0.855	153	148	147	146	151	154	10000	10000
24	0.276	0.283	0.267	0.274	0.268	0.278	0.275	0.278	0.860	0.863	0.868	0.841	152	148	147	154	149	154	9896	10000
25	0.272	0.265	0.271	0.271	0.269	0.265	0.269	0.275	0.848	0.843	0.855	0.859	153	151	154	150	145	150	10000	10000
26	0.278	0.279	0.276	0.265	0.274	0.276	0.280	0.275	0.845	0.862	0.866	0.855	148	146	150	150	154	145	10000	10000
27	0.268	0.283	0.272	0.284	0.273	0.268	0.282	0.279	0.844	0.847	0.878	0.841	154	146	152	151	152	147	10000	10000
28	0.280	0.267	0.269	0.283	0.281	0.272	0.285	0.279	0.872	0.877	0.860	0.870	154	148	154	149	147	149	10000	10000
29	0.267	0.267	0.273	0.272	0.275	0.269	0.274	0.266	0.841	0.874	0.854	0.856	148	150	152	149	147	153	10000	9888
30	0.275	0.272	0.285	0.278	0.278	0.271	0.266	0.268	0.876	0.863	0.876	0.846	147	147	148	149	154	151	10000	10000

TEST ITEM:	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	RL1	RL1		
CONDITION:	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	
PIN NO/ FRE.:	2,3)/(21,224,5)/(23,266,7)/(24,258,9)/(27,28),(3),(21,z),(5),(23,z),(7),(24,z),(9),(27,z21),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(1)																											
UNIT:	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3															
MIN SPEC.:	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
AVERAGE =	1.00	1.00	1.00	1.00	0.26	0.24	0.25	0.26	490.20	514.70	488.20	494.30	1.03	-0.12	-0.66	-0.13	-0.72	-0.12	-0.72	-0.13	-0.71	-30.32	-28.46	-22.16	-17.95	-14.49		
STD DEV =	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.04	32.54	22.60	30.64	28.66	0.05	0.01	0.06	0.01	0.07	0.01	0.06	0.01	0.05	0.63	0.27	0.57	0.65	0.75		
Cpu	13.06	8.39	14.56	8.47	8.07	7.99	9.92	6.47	25.71	36.65	27.33	29.14	1.67															
Cpl	11.70	7.66	12.66	7.58	2.69	2.43	3.23	2.13	1.44	2.43	1.50	1.68	1.98	34.97	1.96	37.21	1.41	39.97	1.47	29.11	1.90	7.54	15.19	5.90	4.09	2.89		
Cpk	11.70	7.66	12.66	7.58	2.69	2.43	3.23	2.13	1.44	2.43	1.50	1.68	1.67	34.97	1.96	37.21	1.41	39.97	1.47	29.11	1.90	7.54	15.19	5.90	4.09	2.89		
DATA																												
21	0.999	1	0.999	0.998	0.25	0.245	0.234	0.196	491	543	504	489	1	-0.121	-0.627	-0.117	-0.607	-0.129	-0.724	-0.119	-0.748	-30.753	-28.229	-22.289	-18.865	-15.312		
22	0.999	1	0.998	1	0.234	0.296	0.248	0.24	494	482	457	519	1.09	-0.121	-0.62	-0.119	-0.745	-0.139	-0.636	-0.138	-0.788	-30.342	-28.467	-21.969	-18.792	-14.918		
23	0.999	1	0.999	1	0.274	0.245	0.279	0.246	495	503	452	437	1.08	-0.124	-0.745	-0.126	-0.77	-0.115	-0.756	-0.112	-0.621	-29.994	-28.554	-21.283	-18.474	-15.247		
24	0.998	0.998	0.998	0.998	0.255	0.248	0.19	0.296	533	526	486	533	1.05	-0.134	-0.614	-0.125	-0.767	-0.129	-0.72	-0.128	-0.644	-29.919	-28.878	-21.023	-17.529	-15.244		
25	0.999	1	0.999	0.999	0.293	0.189	0.269	0.288	438	545	541	464	0.96	-0.114	-0.69	-0.121	-0.643	-0.125	-0.794	-0.121	-0.749	-30.323	-28.269	-22.885	-18.695	-13.408		
26	1	0.998	0.998	0.999	0.278	0.274	0.271	0.262	543	495	453	472	1.1	-0.112	-0.674	-0.134	-0.632	-0.113	-0.798	-0.119	-0.757	-29.245	-28.113	-22.178	-17.537	-15.303		
27	0.999	0.999	0.999	0.999	0.28	0.218	0.241	0.3	463	544	484	501	0.96	-0.112	-0.779	-0.133	-0.675	-0.122	-0.64	-0.123	-0.721	-31.838	-28.999	-22.319	-17.267	-13.487		
28	0.999	0.999	0.999	1	0.292	0.222	0.265	0.242	458	488	465	526	1.07	-0.137	-0.676	-0.136	-0.797	-0.12	-0.74	-0.14	-0.67	-30.373	-28.465	-22.425	-17.072	-14.064		
29	0.999	0.998	0.999	0.998	0.216	0.269	0.262	0.293	520	505	531	490	0.96	-0.124	-0.611	-0.136	-0.729	-0.121	-0.611	-0.139	-0.724	-30.421	-28.207	-22.295	-17.76	-14.025		
30	0.998	0.999	0.998	0.998	0.199	0.203	0.271	0.188	467	516	509	512	0.99	-0.13	-0.607	-0.114	-0.795	-0.118	-0.766	-0.113	-0.712	-30.04	-28.461	-22.895	-17.501	-13.885		

TEST ITEM:	RL2	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	CT2	CT3	CT3
CONDITION:	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz
PIN NO/ FRE.:																											
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																											
AVERAGE =	-30.48	-28.49	-21.96	-17.86	-14.42	-30.32	-28.54	-22.09	-18.17	-15.06	-29.97	-28.49	-22.06	-18.03	-14.44	-34.14	-34.18	-34.64	-35.29	-35.54	-35.36	-34.53	-34.94	-34.96	-35.23	-35.20	-35.11
STD DEV =	0.84	0.27	0.44	0.63	0.93	0.69	0.31	0.41	0.46	0.66	0.81	0.34	0.55	0.53	0.69	0.94	1.03	1.10	1.06	0.82	1.27	0.73	0.99	1.06	1.08	1.18	0.93
Cpu	5.72	15.52	7.63	4.17	2.30	6.88	13.65	8.24	5.92	3.55	5.77	12.09	6.08	5.09	3.12	1.47	1.35	1.41	1.66	2.26	1.41	2.08	1.66	1.56	1.61	1.47	1.83
Cpl																											
Cpk	5.72	15.52	7.63	4.17	2.30	6.88	13.65	8.24	5.92	3.55	5.77	12.09	6.08	5.09	3.12	1.47	1.35	1.41	1.66	2.26	1.41	2.08	1.66	1.56	1.61	1.47	1.83
DATA																											
21	-30.962	-28.843	-22.358	-17.822	-15.646	-29.801	-28.894	-22.733	-18.282	-14.939	-29.216	-28.876	-21.197	-17.185	-14.063	-36.027	-32.781	-34.839	-34.692	-34.319	-36.876	-34.121	-33.241	-33.312	-34.523	-33.071	-34.147
22	-30.11	-28.373	-22.002	-17.121	-13.061	-31.45	-28.446	-21.753	-17.584	-13.851	-29.01	-28.943	-21.393	-18.64	-13.986	-33.798	-35.392	-33.605	-33.773	-36.811	-35.647	-33.769	-33.932	-34.942	-36.52	-35.565	-34.79
23	-29.158	-28.21	-22.622	-17.807	-14.942	-30.76	-28.53	-22.468	-18.707	-15.281	-29.856	-28.506	-22.216	-17.689	-14.249	-33.292	-35.046	-34.551	-36.885	-36.122	-36.827	-34.61	-34.116	-34.709	-35.325	-36.22	-34.192
24	-31.261	-28.801	-21.767	-18.909	-14.934	-31.16	-28.697	-21.864	-18.692	-15.756	-31.182	-28.802	-22.538	-18.967	-13.652	-33.716	-32.576	-34.081	-36.416	-35.798	-34.765	-34.262	-35.79	-34.456	-34.863	-36.119	-36.01
25	-30.345	-28.088	-21.545	-18.013	-14.326	-29.855	-28.641	-22.301	-18.008	-15.099	-29.804	-28.23	-21.613	-18.311	-13.748	-32.832	-32.818	-34.135	-34.754	-36.678	-34.38	-34.347	-35.861	-36.76	-33.056	-34.264	-34.626
26	-31.223	-28.596	-21.934	-17.908	-13.192	-30.474	-28.109	-22.304	-18.742	-14.173	-31.573	-28.904	-22.335	-18.284	-14.29	-34.956	-34.27	-33.744	-34.553	-34.834	-36.237	-33.545	-35.543	-34.476	-36.612	-36.671	-36.677
27	-29.045	-28.344	-21.776	-17.052	-13.154	-29.149	-28.841	-21.689	-18.507	-14.495	-29.167	-28.14	-21.504	-18.178	-14.761	-33.419	-34.124	-36.544	-34.724	-34.685	-36.965	-34.095	-35.331	-34.918	-34.609	-34.296	-35.057
28	-31.79	-28.902	-22.564	-18.926	-15.291	-29.928	-28.023	-21.447	-17.969	-15.574	-30.377	-28.116	-22.453	-17.69	-15.728	-34.71	-34.433	-34.25	-36.604	-35.684	-33.138	-35.237	-34.889	-33.927	-36.722	-36.766	-34.577
29	-30.285	-28.298	-21.907	-17.845	-14.279	-29.761	-28.954	-21.816	-17.476	-15.988	-29.627	-28.316	-22.495	-17.97	-15.643	-33.659	-35.177	-36.874	-36.258	-35.67	-34.474	-35.244	-34.162	-36.851	-35.263	-34.887	-34.367
30	-30.59	-28.419	-21.133	-17.173	-15.367	-30.854	-28.308	-22.544	-17.714	-15.454	-29.862	-28.04	-22.879	-17.394	-14.303	-35.036	-35.187	-33.747	-34.267	-34.777	-34.272	-36.028	-36.545	-35.281	-34.815	-34.189	-36.678

TEST ITEM:	CT3	CT3	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	Hipot	
CONDITION:	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	50VDC, ε
PIN NO/ FRE.:																								
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	1mA
MAX SPEC.:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																								
AVERAGE =	-34.85	-34.23	-34.42	-34.74	-35.06	-35.30	-35.01	-34.35	-35.08	-34.55	-35.00	-34.80	-34.72	-34.26	-34.78	-34.77	-33.66	-34.86	-34.67	-35.20	-34.65	-34.99	-34.81	
STD DEV =	1.01	1.05	0.95	1.16	1.11	1.16	1.12	0.90	1.05	1.01	1.21	1.03	0.97	1.04	1.04	1.18	0.87	1.04	1.16	0.89	1.00	1.10	1.09	
Cpu	1.59	1.34	1.56	1.36	1.52	1.52	1.49	1.60	1.62	1.50	1.38	1.56	1.63	1.37	1.54	1.35	1.40	1.56	1.35	1.96	1.55	1.51	1.47	
Cpl																								
Cpk	1.59	1.34	1.56	1.36	1.52	1.52	1.49	1.60	1.62	1.50	1.38	1.56	1.63	1.37	1.54	1.35	1.40	1.56	1.35	1.96	1.55	1.51	1.47	
DATA																								
21	-36.007	-34.637	-35.46	-33.625	-35.972	-34.808	-35.528	-34.643	-34.907	-34.361	-35.431	-35.007	-34.517	-36.304	-33.322	-34.226	-32.689	-36.612	-35.514	-34.608	-35.784	-34.427	-34.455	PASS
22	-33.102	-36.033	-34.518	-34.382	-34.785	-34.697	-34.598	-35.453	-34.652	-33.878	-34.712	-36.482	-35.414	-34.752	-36.244	-36.26	-32.901	-35.281	-32.815	-36.32	-35.879	-34.843	-32.995	PASS
23	-34.457	-34.139	-33.646	-35.471	-34.888	-36.799	-34.469	-34.869	-36.954	-33.824	-32.434	-36.515	-34.707	-33.79	-34.644	-35.129	-32.922	-33.729	-33.464	-34.699	-34.328	-35.55	-35.03	PASS
24	-34.124	-35	-34.738	-34.678	-36.071	-35.462	-33.083	-34.999	-34.665	-33.915	-36.281	-33.393	-34.825	-34.382	-35.157	-33.882	-33.698	-34.613	-34.536	-35.997	-33.218	-36.002	-36.68	PASS
25	-36.819	-32.647	-32.512	-33.583	-33.457	-35.997	-33.934	-34.655	-34.514	-34.884	-36.404	-34.452	-36.083	-32.814	-34.999	-33.275	-34.977	-34.324	-35.571	-34.249	-35.691	-34.718	-36.097	PASS
26	-34.882	-34.853	-34.488	-36.691	-34.438	-33.03	-35.249	-34.264	-34.664	-36.363	-33.481	-33.532	-35.797	-33.743	-36.05	-36.196	-34.28	-33.013	-33.664	-35.982	-34.229	-36.504	-34.453	PASS
27	-35.452	-34.222	-33.386	-34.164	-33.144	-33.783	-34.062	-34.786	-33.765	-34.022	-35.338	-35.22	-35.14	-34.04	-35.474	-32.865	-33.417	-35.214	-34.781	-35.062	-35.572	-34.411	-35.836	PASS
28	-34.317	-33.991	-34.412	-33.04	-36.721	-36.394	-36.754	-34.529	-36.602	-33.286	-36.151	-34.329	-34.051	-35.184	-34.011	-34.703	-34.071	-35.914	-36.956	-34.942	-34.219	-36.625	-34.706	PASS
29	-35.227	-32.232	-35.476	-36.414	-36.009	-35.555	-36.103	-32.58	-33.906	-36.415	-35.257	-35.031	-34.209	-32.706	-34.959	-34.828	-32.547	-34.138	-35.273	-33.72	-34.606	-33.733	-33.422	PASS
30	-34.104	-34.525	-35.576	-35.311	-35.149	-36.484	-36.346	-32.702	-36.154	-34.573	-34.478	-34.028	-32.503	-34.92	-32.903	-36.343	-35.068	-35.714	-34.119	-36.457	-33.006	-33.11	-34.423	PASS

## Appendix15

### JXD0-0001XNL After Temperature life electrical test data.

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH	
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22)	(23),(26)	(24),(25)	(27),(28)	21	(23),(21)	(24),(21)	(27),(23)	(24),(23)	(27),(24)	(27),(24)	(21),(22),(23)
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	165	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	135	10
AVERAGE =	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.86	0.86	0.86	0.86	147.80	149.90	149.60	150.20	151.50	149.60	9956.60	
STD DEV =	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.32	2.77	2.69	2.68	1.96	2.73	130.20	
Cpu	26.82	32.86	24.28	26.99	23.91	21.47	24.32	27.97	10.02	8.82	10.88	10.80	2.48	1.82	1.91	1.84	2.29	1.88	12.91	
Cpl	9.26	11.23	8.44	9.14	8.07	7.46	8.49	9.49	13.75	11.89	14.88	14.83	1.84	1.79	1.81	1.89	2.80	1.78	25.46	
Cpk	9.26	11.23	8.44	9.14	8.07	7.46	8.49	9.49	10.02	8.82	10.88	10.80	1.84	1.79	1.81	1.84	2.29	1.78	12.91	
DATA																				
21	0.283	0.282	0.288	0.280	0.271	0.268	0.285	0.283	0.858	0.871	0.875	0.864	150	148	146	154	148	148	10000	
22	0.285	0.275	0.289	0.289	0.280	0.281	0.276	0.274	0.876	0.842	0.853	0.857	146	147	153	148	154	145	10000	
23	0.267	0.271	0.280	0.275	0.274	0.288	0.280	0.288	0.850	0.847	0.860	0.875	146	146	147	149	150	154	9566	
24	0.276	0.278	0.285	0.267	0.279	0.273	0.289	0.276	0.846	0.859	0.863	0.865	147	147	151	154	153	152	10000	
25	0.283	0.272	0.274	0.272	0.266	0.284	0.266	0.279	0.876	0.846	0.853	0.872	147	152	153	146	153	151	10000	
26	0.287	0.288	0.274	0.282	0.289	0.290	0.289	0.269	0.878	0.879	0.848	0.875	149	153	150	154	149	153	10000	
27	0.282	0.275	0.265	0.270	0.284	0.287	0.280	0.268	0.864	0.869	0.875	0.863	145	153	153	149	153	150	10000	
28	0.269	0.276	0.284	0.283	0.265	0.283	0.274	0.277	0.863	0.848	0.867	0.845	149	153	148	149	150	147	10000	
29	0.281	0.281	0.285	0.280	0.278	0.266	0.287	0.274	0.867	0.876	0.877	0.845	146	152	146	149	152	148	10000	
30	0.284	0.285	0.282	0.273	0.281	0.285	0.286	0.285	0.849	0.857	0.851	0.868	153	148	149	150	153	148	10000	

TEST ITEM:	OPSH	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	RL1	
CONDITION:	RT	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	60MHz	
PIN NO/ FRE.:	(9),(10),(1,3),(21,21,5),(23,21,7),(24,21,9),(27,21,3),(21,1,5),(23,1,7),(24,1,9),(27,2,21),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(1																									
UNIT:	M	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	
MAX SPEC:	15000	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3												
MIN SPEC.:	10	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-16.0	-16.0	-12.0
AVERAGE =	9977.10	1.00	1.00	1.00	1.00	0.24	0.24	0.25	0.24	499.20	478.00	489.10	493.80	1.03	-0.13	-0.67	-0.13	-0.73	-0.12	-0.71	-0.13	-0.68	-30.68	-28.53	-22.03	
STD DEV =	68.70	0.00	0.00	0.00	0.00	0.04	0.03	0.04	0.04	27.21	26.19	32.37	29.01	0.05	0.01	0.05	0.01	0.07	0.01	0.04	0.01	0.06	0.71	0.27	0.68	
Cpu	24.37	11.56	8.92	11.78	11.56	6.31	9.18	6.52	7.20	30.63	32.10	25.86	28.80	1.95										6.89	15.74	4.92
Cpl	48.36	10.67	7.75	10.44	10.67	1.89	2.71	2.09	2.20	1.83	1.63	1.43	1.65	2.45	31.93	2.28	35.58	1.35	29.25	2.26	36.15	1.84	6.89	15.74	4.92	
Cpk	24.37	10.67	7.75	10.44	10.67	1.89	2.71	2.09	2.20	1.83	1.63	1.43	1.65	1.95	31.93	2.28	35.58	1.35	29.25	2.26	36.15	1.84	6.89	15.74	4.92	
DATA																										
21	10000	0.999	0.999	1	1	0.261	0.214	0.194	0.26	524	437	483	481	1.06	-0.136	-0.708	-0.13	-0.664	-0.11	-0.684	-0.121	-0.693	-30.93	-28.56	-21.6	
22	10000	0.999	0.998	0.999	0.999	0.238	0.278	0.298	0.279	441	442	467	452	0.98	-0.136	-0.634	-0.129	-0.763	-0.136	-0.748	-0.136	-0.629	-31.67	-28	-22.96	
23	10000	1	1	0.998	1	0.287	0.27	0.265	0.214	463	486	473	494	1	-0.116	-0.624	-0.13	-0.793	-0.13	-0.767	-0.134	-0.779	-31.19	-28.98	-21.21	
24	10000	0.999	0.998	0.998	0.999	0.243	0.216	0.271	0.27	504	498	465	492	1.1	-0.133	-0.708	-0.129	-0.788	-0.123	-0.691	-0.123	-0.659	-30.44	-28.31	-21.7	
25	10000	1	0.998	0.999	0.999	0.216	0.243	0.294	0.25	506	497	483	472	1.06	-0.121	-0.627	-0.114	-0.784	-0.127	-0.672	-0.114	-0.717	-29.72	-28.69	-22.93	
26	10000	0.998	1	0.999	1	0.288	0.244	0.263	0.242	503	440	524	535	0.97	-0.132	-0.602	-0.112	-0.763	-0.137	-0.639	-0.117	-0.767	-30.09	-28.57	-22.95	
27	9771	1	0.998	0.998	0.999	0.193	0.185	0.213	0.18	534	502	451	524	0.98	-0.11	-0.767	-0.131	-0.738	-0.113	-0.773	-0.125	-0.603	-31.91	-28.86	-22.43	
28	10000	0.999	0.998	0.999	0.999	0.286	0.207	0.243	0.215	485	477	545	532	1.06	-0.135	-0.674	-0.139	-0.757	-0.122	-0.677	-0.135	-0.612	-29.75	-28.49	-21.53	
29	10000	0.999	0.999	0.999	0.998	0.184	0.252	0.185	0.206	512	497	539	505	1.04	-0.134	-0.697	-0.122	-0.622	-0.11	-0.728	-0.133	-0.694	-30.62	-28.43	-21.25	
30	10000	0.999	0.998	0.999	0.999	0.183	0.246	0.279	0.298	520	504	461	451	1.09	-0.12	-0.65	-0.135	-0.602	-0.135	-0.671	-0.116	-0.647	-30.48	-28.39	-21.71	

TEST ITEM:	RL1	RL1	RL2	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	CT2	CT2	
CONDITION:	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	
PIN NO/ FRE.:																											
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																											
AVERAGE =	-17.97	-14.12	-30.47	-28.55	-21.63	-17.99	-14.27	-30.63	-28.60	-22.14	-18.26	-14.40	-30.52	-28.46	-22.08	-17.83	-14.76	-35.01	-35.12	-35.32	-35.11	-34.59	-34.91	-34.44	-34.97	-34.98	
STD DEV =	0.57	0.91	0.72	0.28	0.57	0.57	0.68	0.54	0.29	0.70	0.60	1.06	0.76	0.32	0.48	0.42	0.90	1.20	1.18	1.14	1.13	1.06	1.18	0.85	1.12	1.19	
Cpu	4.65	2.24	6.74	14.82	5.59	4.67	3.06	9.02	14.72	4.83	4.62	2.01	6.35	13.00	6.99	6.15	2.50	1.39	1.44	1.55	1.51	1.45	1.39	1.73	1.48	1.39	
Cpl																											
Cpk	4.65	2.24	6.74	14.82	5.59	4.67	3.06	9.02	14.72	4.83	4.62	2.01	6.35	13.00	6.99	6.15	2.50	1.39	1.44	1.55	1.51	1.45	1.39	1.73	1.48	1.39	
DATA																											
21	-17.5	-15.88	-30.89	-28.81	-22.98	-18.49	-13.79	-29.73	-28.86	-21.99	-18.12	-15.52	-31.35	-28.99	-22.18	-18.55	-13.44	-34.49	-35.79	-35.65	-36.91	-33.35	-34.16	-34.12	-36.29	-34.4	
22	-17.97	-13.93	-29.68	-28.87	-21.03	-18.53	-14.53	-31.45	-28.84	-21.01	-18.91	-15.79	-30.04	-28.33	-21.79	-17.3	-15.44	-33.75	-33.98	-34.86	-36.28	-35.46	-34.01	-34.32	-36.62	-34.94	
23	-17.73	-14.89	-30.91	-28.92	-21.99	-18.03	-13.49	-31.14	-28.94	-22.85	-18	-13.69	-31.84	-28.09	-22.15	-18.33	-15.4	-36.01	-36.64	-36.64	-35.91	-34.22	-35.02	-34.16	-33.14	-36.78	
24	-17.02	-13.54	-31	-28.27	-22.16	-18.79	-15.84	-30.6	-28.3	-22.81	-18.82	-14.77	-30.85	-28.46	-21.13	-17.56	-14.81	-33.73	-35.93	-36.82	-34.44	-36.68	-36.5	-33.97	-36.37	-36.13	
25	-18.54	-14.17	-29.96	-28.67	-21.49	-18.03	-13.97	-31.05	-28.97	-22.4	-18.89	-14.13	-29.47	-28.55	-22.05	-17.87	-14.68	-36.05	-35.11	-34.15	-34.07	-33.46	-33.51	-34.52	-34.36	-36.76	
26	-18.59	-13.05	-29.66	-28.85	-21.34	-17.36	-14.71	-30.13	-28.08	-21.88	-18.98	-14.97	-30.27	-28.07	-22.32	-17.98	-15.97	-36.62	-35.15	-34.5	-35.52	-35.06	-35.74	-34.19	-35.59	-33.58	
27	-17.82	-15.26	-29.87	-28.23	-21.69	-17.47	-14.27	-30	-28.4	-21.13	-17.03	-13.18	-30.98	-28.98	-22.63	-17.38	-15.51	-36.86	-36.35	-34.22	-35.92	-35.34	-36.04	-34.13	-34.92	-34.49	
28	-18.97	-14.13	-31.05	-28.3	-21.18	-17.19	-13.44	-30.73	-28.4	-22.83	-17.85	-13.01	-29.99	-28.25	-22.24	-17.29	-15.37	-33.5	-33.36	-33.62	-34.71	-33.85	-36.44	-36.94	-34.02	-35.1	
29	-18.14	-13.1	-29.84	-28.19	-21.06	-17.39	-13.95	-31.15	-28.62	-22.93	-18.14	-15.84	-29.44	-28.2	-21.47	-18.23	-13.54	-34.4	-35.81	-35.95	-34.25	-33.36	-34.7	-33.87	-34.11	-33.02	
30	-17.41	-13.25	-31.83	-28.42	-21.41	-18.63	-14.71	-30.38	-28.54	-21.53	-17.91	-13.14	-30.98	-28.65	-22.82	-17.83	-13.48	-34.65	-33.06	-36.79	-33.07	-35.11	-32.99	-34.13	-34.3	-34.64	

TEST ITEM:	CT2	CT3	CT3	CT3	CT3	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	CMRR4	CMRR4	CMRR4	
CONDITION:	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	
PIN NO/ FRE.:																											
UNIT:	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
MAX SPEC:	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0
MIN SPEC.:																											
AVERAGE =	-35.38	-35.07	-34.19	-35.21	-34.35	-35.14	-34.80	-35.40	-35.07	-35.41	-34.72	-35.09	-35.03	-35.08	-35.31	-34.76	-35.19	-34.68	-34.57	-34.22	-35.01	-35.02	-34.91	-35.51	-34.74	-35.35	
STD DEV =	1.29	0.97	0.67	1.07	0.70	1.21	1.16	1.00	0.70	1.09	0.84	1.11	0.95	1.23	0.93	1.15	1.21	1.08	1.01	0.86	0.70	1.18	1.08	1.23	1.08	1.18	
Cpu	1.39	1.75	2.08	1.63	2.08	1.42	1.38	1.81	2.42	1.66	1.87	1.53	1.76	1.37	1.91	1.38	1.43	1.45	1.51	1.64	2.39	1.41	1.51	1.50	1.46	1.52	
Cpl																											
Cpk	1.39	1.75	2.08	1.63	2.08	1.42	1.38	1.81	2.42	1.66	1.87	1.53	1.76	1.37	1.91	1.38	1.43	1.45	1.51	1.64	2.39	1.41	1.51	1.50	1.46	1.52	
DATA																											
21	-35.95	-34	-34.44	-34.82	-33.48	-36.2	-35.71	-35.51	-34.94	-34.17	-34.65	-33.74	-34.64	-35.41	-33.97	-32.96	-34.95	-34.27	-34.56	-33.18	-34.84	-36.93	-36.64	-36.58	-34.36	-36.98	
22	-33.08	-34.65	-33.48	-36.92	-34.77	-34.13	-33.94	-35	-35.91	-34.92	-33.75	-33.44	-34.03	-33.28	-35.76	-33.79	-36.48	-34.44	-33.84	-34	-36.55	-34.51	-34.34	-36.74	-34.06	-35.87	
23	-34.69	-33.64	-34.44	-36.5	-33.35	-36.36	-33.14	-34.43	-34.78	-35.97	-35.8	-36.21	-33.7	-34.82	-35.49	-36.54	-36.61	-33.2	-36.47	-35.33	-35.07	-33.91	-33.06	-35.31	-34.08	-33.68	
24	-36.13	-34.54	-35.36	-34.59	-35.51	-36.74	-36.91	-35.89	-35.93	-33.27	-35.91	-34.61	-36.58	-34.1	-36.88	-34.49	-36.16	-36.37	-35.4	-34.77	-35.13	-36.13	-33.92	-36.62	-33.15	-35.6	
25	-36.21	-35.59	-34.79	-34.64	-34.58	-34.35	-35.65	-35.53	-34.95	-36.85	-34.7	-34.79	-36.18	-36.4	-35.59	-34.81	-35.93	-33.76	-33.43	-33.35	-34.61	-34.61	-36.4	-36.45	-35.08	-34.46	
26	-35.87	-34.55	-33.01	-36.7	-34.79	-34.33	-36.14	-34.55	-34.43	-34.93	-34.44	-36.32	-34.51	-36.47	-34.58	-35.95	-33.07	-34.42	-35.07	-33.2	-34.45	-36.47	-35.79	-33.57	-36.67	-36.91	
27	-36.88	-36.43	-34.03	-35.43	-34.29	-36.99	-34.49	-36.42	-34.86	-35.06	-34.72	-36.81	-36.27	-36.79	-34.97	-34.47	-34.77	-34.43	-35.8	-35.24	-34.09	-33.4	-33.99	-36.95	-33.48	-33.25	
28	-36.48	-36.87	-34.04	-34.53	-34.43	-34.61	-33.63	-36.44	-36.04	-35.85	-35.76	-34.7	-34.61	-33.32	-34.92	-34.78	-36.2	-34.14	-33.8	-34.95	-35.47	-35.99	-35.14	-34.4	-36.03	-35.3	
29	-35.5	-35.13	-33.57	-33.59	-33.37	-33.53	-34.49	-33.47	-35.23	-36.69	-33.25	-34.29	-35.41	-34.35	-34.21	-36.35	-34.05	-36.92	-33.4	-34.89	-34.25	-34.52	-35.09	-34.35	-34.74	-35.96	
30	-33	-35.26	-34.75	-34.43	-34.95	-34.19	-33.96	-36.8	-33.69	-36.38	-34.26	-36.03	-34.44	-35.83	-36.72	-33.44	-33.63	-34.89	-33.98	-33.3	-35.63	-33.77	-34.7	-34.16	-35.71	-35.47	





TEST ITEM: Hipot  
CONDITION: 50VDC, 60  
PIN NO/ FRE.:  
UNIT: 1mA  
MAX SPEC:  
MIN SPEC.:  
AVERAGE =  
STD DEV =  
Cpu  
Cpl  
Cpk  
DATA  
21 PASS  
22 PASS  
23 PASS  
24 PASS  
25 PASS  
26 PASS  
27 PASS  
28 PASS  
29 PASS  
30 PASS

## Appendix 16

After 360hrs Temperature life Mating/Unmating force test data

<i>Mating/Unmating</i>		
TEST ITEM:	Insertion force	Withdrawal force
PIN NO:	RJ45	RJ45
UNIT:	kg	kg
21#	4.57	2.08
22#	4.65	2.13
23#	4.50	2.51
24#	4.81	2.46
25#	4.63	2.80
26#	4.87	3.32
27#	4.18	1.75
28#	4.74	2.20
29#	4.69	2.73
30#	4.30	2.67

**Appendix 20**  
**JXD0-0001XNL 0hr electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(1)	(3),(1),(1)	(4),(1),(1)	(5),(1),(1)	(6),(1),(1)	(7),(1),(1)	(8),(1)	(9),(1)	(21),(22)	(23),(26)	(24),(25)	(27),(28)	(21),(23)	(21),(24)	(21),(27)	(23),(24)	(23),(27)	(24),(27)	(1),(21,22)
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10
AVERAGE =	0.28	0.28	0.27	0.28	0.27	0.28	0.28	0.27	0.86	0.86	0.86	0.86	149.00	151.40	151.10	149.00	149.60	148.90	9968.10
STD DEV =	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	2.79	2.91	2.81	3.46	2.29	2.88	95.70
Cpu	32.09	40.17	54.74	30.23	36.89	38.25	28.80	35.73	8.40	8.30	12.11	12.30	1.91	1.56	1.65	1.54	2.24	1.86	17.53
Cpl	10.91	13.63	17.48	10.09	12.10	12.96	9.77	11.86	11.39	11.18	16.60	16.59	1.67	1.88	1.91	1.35	2.13	1.61	34.69
Cpk	10.91	13.63	17.48	10.09	12.10	12.96	9.77	11.86	8.40	8.30	12.11	12.30	1.67	1.56	1.65	1.35	2.13	1.61	17.53
DATA	-----																		
31	0.267	0.275	0.267	0.282	0.276	0.280	0.280	0.274	0.867	0.878	0.874	0.844	151	148	153	147	151	148	10000
32	0.279	0.281	0.273	0.282	0.268	0.279	0.269	0.267	0.877	0.879	0.853	0.869	146	149	155	155	153	145	10000
33	0.271	0.279	0.269	0.266	0.279	0.281	0.270	0.270	0.862	0.842	0.846	0.854	154	146	146	145	148	147	10000
34	0.284	0.277	0.267	0.278	0.268	0.276	0.280	0.275	0.840	0.844	0.867	0.870	147	155	151	153	150	153	10000
35	0.285	0.268	0.271	0.281	0.272	0.283	0.285	0.281	0.870	0.842	0.856	0.849	151	152	152	149	149	153	9681
36	0.277	0.282	0.267	0.268	0.278	0.275	0.269	0.277	0.848	0.868	0.856	0.862	147	150	147	146	153	147	10000
37	0.276	0.272	0.266	0.273	0.268	0.269	0.284	0.282	0.844	0.865	0.876	0.871	147	155	151	146	146	147	10000
38	0.279	0.280	0.269	0.268	0.277	0.270	0.278	0.267	0.872	0.860	0.861	0.864	147	153	154	148	147	151	10000
39	0.283	0.277	0.268	0.275	0.266	0.277	0.284	0.275	0.877	0.866	0.871	0.861	147	154	149	154	148	146	10000
40	0.275	0.282	0.277	0.278	0.277	0.282	0.274	0.276	0.848	0.847	0.865	0.849	153	152	153	147	151	152	10000

TEST ITEM:	OPSH	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW	IL1	IL1	IL2	IL2	IL3	IL3	IL4	IL4	RL1	RL1	
CONDITION:	RT	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100m	100kHz, 100m	100kHz, 100m	100kHz, 100m	100m, 100kHz	100m, 100kHz	100m, 100kHz	100m, 100kHz	1kHz, 1mV	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	100MHz	1MHz	40MHz	
PIN NO / FRE.:	(9),(10),(2,3)	(21,224,5)	(23,266,7)	(24,258,9)	(27,28),(3),(21,2),(5),(23,2),(7),(24,2),(9),(27,221),(22),(23),(26),(24),(25),(27),(28),(23,24,25,26,27,28),(																				
UNIT:	M	T	T	T	T	u	u	u	u	u	u	u	u	n	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	
MAX SPEC:	15000	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3										-16.0	-16.0
MIN SPEC.:	10	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
AVERAGE =	9977.90	1.00	1.00	1.00	1.00	0.23	0.24	0.23	0.24	489.60	506.40	491.70	487.60	1.04	-0.13	-0.70	-0.12	-0.70	-0.13	-0.67	-0.12	-0.71	-30.82	-28.68	
STD DEV =	66.30	0.00	0.00	0.00	0.00	0.02	0.04	0.03	0.03	33.12	35.68	35.20	30.37	0.04	0.01	0.07	0.01	0.06	0.01	0.05	0.01	0.07	0.86	0.26	
Cpu	25.25	11.78	10.75	10.19	10.75	12.55	6.00	7.75	7.49	25.27	23.30	23.76	27.57	2.38										5.75	16.52
Cpl	50.12	10.44	9.35	9.69	9.35	3.63	1.82	2.19	2.30	1.41	1.46	1.34	1.51	3.04	32.67	1.52	43.74	1.78	36.88	2.42	37.87	1.47			
Cpk	25.25	10.44	9.35	9.69	9.35	3.63	1.82	2.19	2.30	1.41	1.46	1.34	1.51	2.38	32.67	1.52	43.74	1.78	36.88	2.42	37.87	1.47	5.75	16.52	
DATA																									
31	10000	0.999	0.998	1	0.998	0.221	0.25	0.196	0.193	474	455	486	517	1.09	-0.137	-0.779	-0.122	-0.663	-0.124	-0.606	-0.134	-0.758	-31.634	-28.864	
32	9779	0.998	0.999	1	0.998	0.271	0.294	0.252	0.265	501	535	548	528	1.06	-0.135	-0.79	-0.126	-0.75	-0.123	-0.688	-0.127	-0.613	-31.766	-28.755	
33	10000	0.998	0.998	1	0.999	0.217	0.197	0.184	0.235	547	490	483	517	1.05	-0.128	-0.63	-0.114	-0.626	-0.138	-0.607	-0.126	-0.79	-31.777	-28.124	
34	10000	0.999	0.998	1	0.999	0.251	0.189	0.183	0.295	463	515	439	453	1.06	-0.131	-0.717	-0.127	-0.717	-0.129	-0.65	-0.112	-0.683	-29.389	-28.887	
35	10000	1	0.999	0.999	0.998	0.232	0.285	0.248	0.22	511	460	487	456	1.03	-0.138	-0.672	-0.121	-0.708	-0.121	-0.723	-0.115	-0.603	-31.578	-28.843	
36	10000	0.999	0.999	0.999	0.998	0.256	0.256	0.273	0.262	538	546	458	437	1.06	-0.133	-0.784	-0.11	-0.785	-0.116	-0.703	-0.13	-0.73	-30.029	-28.61	
37	10000	0.999	0.999	0.999	0.999	0.225	0.185	0.204	0.193	449	523	548	476	1.06	-0.115	-0.615	-0.114	-0.616	-0.134	-0.717	-0.123	-0.798	-29.817	-28.801	
38	10000	0.998	0.998	1	1	0.198	0.293	0.221	0.263	460	457	457	476	1.01	-0.122	-0.639	-0.133	-0.7	-0.139	-0.721	-0.13	-0.662	-30.577	-28.279	
39	10000	0.999	1	0.998	0.998	0.229	0.197	0.255	0.222	455	538	520	506	0.98	-0.128	-0.661	-0.121	-0.657	-0.12	-0.673	-0.116	-0.75	-30.294	-28.889	
40	10000	0.999	0.998	1	0.999	0.22	0.259	0.269	0.28	498	545	491	510	0.97	-0.11	-0.751	-0.126	-0.775	-0.118	-0.614	-0.112	-0.734	-31.376	-28.794	

TEST ITEM:	RL1	RL1	RL1	RL2	RL2	RL2	RL2	RL2	RL3	RL3	RL3	RL3	RL3	RL4	RL4	RL4	RL4	RL4	CT1	CT1	CT1	CT1	CT1	CT2	CT2	
CONDITION:	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	
PIN NO/ FRE.:																										
UNIT:	dB																									
MAX SPEC:	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-16.0	-16.0	-12.0	-10.0	-8.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	-30.0	
MIN SPEC.:																										
AVERAGE =	-21.93	-18.24	-14.46	-31.12	-28.49	-21.99	-18.08	-14.24	-30.73	-28.48	-21.93	-18.00	-14.38	-30.33	-28.53	-21.94	-17.96	-14.36	-34.72	-34.63	-35.05	-35.34	-35.06	-35.28	-34.61	
STD DEV =	0.53	0.49	0.53	0.74	0.33	0.61	0.57	0.88	0.59	0.24	0.65	0.58	0.82	0.88	0.26	0.58	0.68	0.52	0.84	1.12	0.77	1.06	0.86	0.90	1.05	
Cpu	6.20	5.63	4.06	6.80	12.51	5.44	4.68	2.35	8.27	17.07	5.06	4.58	2.58	5.41	15.81	5.72	3.88	4.04	1.88	1.37	2.18	1.67	1.97	1.96	1.47	
Cpl																										
Cpk	6.20	5.63	4.06	6.80	12.51	5.44	4.68	2.35	8.27	17.07	5.06	4.58	2.58	5.41	15.81	5.72	3.88	4.04	1.88	1.37	2.18	1.67	1.97	1.96	1.47	
DATA																										
31	-22.479	-18.403	-14.672	-31.909	-28.774	-21.765	-17.887	-13.262	-30.77	-28.46	-21.288	-18.698	-14.583	-31.188	-28.371	-21.921	-18.657	-14.286	-35.668	-34.246	-35.553	-36.971	-34.851	-35.842	-33.799	
32	-21.132	-17.439	-15.001	-31.934	-28.485	-21.77	-17.824	-14.107	-30.408	-28.488	-21.085	-17.154	-13.217	-29.785	-28.799	-21.145	-17.102	-14.607	-34.657	-34.865	-34.606	-35.611	-35.651	-34.77	-34.025	
33	-22.341	-18.384	-14.919	-30.194	-28.318	-21.026	-18.39	-14.574	-31.388	-28.26	-22.973	-18.218	-14.774	-31.896	-28.101	-22.487	-18.56	-13.469	-35.298	-36.794	-35.605	-35.574	-34.231	-36.718	-33.613	
34	-21.509	-18.868	-14.809	-31.077	-28.743	-22.431	-18.426	-15.84	-29.471	-28.642	-22.772	-18.031	-15.065	-31.599	-28.915	-21.579	-17.653	-14.516	-33.107	-36.186	-34.319	-34.735	-34.95	-35.667	-34.562	
35	-21.581	-17.921	-13.81	-31.475	-28.131	-22.122	-17.504	-13.147	-30.622	-28.989	-21.681	-17.474	-15.521	-29.447	-28.528	-22.029	-18.909	-14.279	-34.451	-34.086	-34.507	-33.064	-34.578	-34.979	-36.275	
36	-21.872	-18.015	-14.005	-31.245	-28.014	-21.326	-17.296	-15.3	-31.069	-28.632	-22.495	-17.358	-13.814	-30.135	-28.177	-21.489	-17.312	-14.387	-36.23	-33.661	-36.924	-35.107	-36.393	-34.179	-34.814	
37	-22.917	-18.181	-13.512	-31.756	-28.756	-22.754	-17.319	-13.576	-31.617	-28.416	-22.115	-18.628	-15.645	-30.301	-28.805	-22.873	-17.061	-14.598	-34.404	-35.238	-35.176	-36.336	-35.677	-34.474	-33.116	
38	-22.307	-17.573	-15.214	-30.095	-28.002	-22.447	-18.989	-13.733	-30.669	-28.336	-21.391	-18.963	-13.875	-29.238	-28.34	-22.395	-18.806	-15.403	-34.876	-33.579	-34.605	-34.66	-33.414	-34.531	-36.138	
39	-21.366	-18.981	-14.242	-29.897	-28.876	-21.319	-18.281	-13.715	-30.159	-28.028	-21.213	-17.799	-13.312	-29.525	-28.551	-21.055	-17.993	-14.504	-34.653	-33.01	-34.982	-34.84	-34.737	-34.756	-34.054	
40	-21.844	-18.624	-14.41	-31.624	-28.837	-22.892	-18.851	-15.181	-31.133	-28.569	-22.298	-17.691	-13.998	-30.145	-28.707	-22.415	-17.576	-13.526	-33.889	-34.589	-34.231	-36.453	-36.091	-36.866	-35.734	

TEST ITEM:	CT2	CT2	CT2	CT3	CT3	CT3	CT3	CT3	CMRR1	CMRR1	CMRR1	CMRR1	CMRR1	CMRR2	CMRR2	CMRR2	CMRR2	CMRR2	CMRR3	CMRR3	CMRR3	CMRR3	CMRR4	CMRR4	
CONDITION:	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz	60MHz	80MHz	100MHz	1MHz	40MHz
PIN NO/ FRE.:																									
UNIT:	dB																								
MAX SPEC:	-30.0																								
MIN SPEC.:																									
AVERAGE =	-34.77	-34.76	-34.43	-34.58	-35.16	-35.27	-35.39	-34.42	-35.13	-34.24	-35.21	-34.48	-35.02	-34.64	-34.91	-35.16	-35.01	-35.10	-34.51	-34.45	-35.08	-35.09	-34.88	-34.92	-34.62
STD DEV =	1.19	0.89	0.69	1.14	1.27	1.25	1.09	0.87	1.09	0.91	0.74	0.84	1.17	0.85	0.96	1.26	1.19	1.11	0.99	1.11	1.18	1.24	0.57	1.07	0.93
Cpu	1.34	1.78	2.15	1.33	1.35	1.41	1.65	1.70	1.57	1.55	2.35	1.77	1.43	1.81	1.70	1.36	1.41	1.53	1.53	1.34	1.44	1.37	2.85	1.53	1.65
Cpl																									
Cpk	1.34	1.78	2.15	1.33	1.35	1.41	1.65	1.70	1.57	1.55	2.35	1.77	1.43	1.81	1.70	1.36	1.41	1.53	1.53	1.34	1.44	1.37	2.85	1.53	1.65
DATA																									
31	-36.019	-35.285	-34.786	-35.906	-36.121	-33.715	-34.511	-33.652	-36.02	-33.825	-33.802	-34.254	-36.98	-33.397	-36.153	-34.671	-34.37	-36.056	-35.895	-36.557	-33.295	-34.441	-34.744	-34.945	-34.983
32	-36.721	-36.866	-35.908	-33.275	-34.336	-35.915	-36.231	-34.844	-36.516	-33.03	-36.104	-33.359	-34.917	-35.463	-34.72	-33.108	-36.617	-36.328	-33.752	-33.059	-34.475	-35.845	-35.089	-36.12	-33.063
33	-34.057	-34.901	-34.815	-33.431	-35.42	-36.932	-36.772	-35.727	-36.082	-34.054	-35.018	-34.913	-33.961	-34.219	-36.883	-36.905	-36.536	-36.434	-34.492	-33.916	-34.816	-34.059	-34.48	-35.424	-34.508
34	-33.012	-34.378	-34.14	-34.445	-33.062	-36.707	-34.774	-36.041	-36.418	-36.26	-34.704	-33.14	-34.81	-34.712	-34.366	-36.391	-35.565	-33.581	-33.528	-36.303	-36.951	-36.283	-34.472	-33.291	-36.701
35	-35.328	-34.567	-33.54	-35.495	-33.176	-36.993	-35.831	-34.11	-33.702	-34.062	-35.938	-35.194	-36.898	-34.75	-33.839	-33.398	-34.577	-33.518	-36.443	-33.965	-34.825	-36.961	-34.108	-35.382	-34.779
36	-34.87	-34.437	-34.278	-36.789	-36.726	-33.678	-34.752	-34.011	-34.702	-34.129	-35.909	-36.036	-34.548	-35.924	-34.866	-35.922	-33.944	-35.621	-33.891	-33.631	-34.148	-33.49	-35.786	-33.95	-34.598
37	-36.158	-33.57	-34.774	-34.818	-34.694	-34.582	-35.937	-34.473	-35.597	-35.265	-35.897	-34.761	-33.695	-35.393	-33.581	-36.364	-33.395	-34.53	-33.383	-34.405	-34.577	-33.737	-35.286	-34.909	-35.019
38	-34.137	-33.669	-34.084	-34.507	-36.271	-34.177	-35.289	-34.583	-33.399	-33.18	-35.371	-34.698	-34.554	-33.079	-35.444	-34.832	-34.053	-36.135	-34.272	-33.493	-34.369	-34.511	-35.854	-36.251	-34.978
39	-33.448	-34.652	-33.381	-34.113	-35.14	-35.546	-36.75	-33.539	-34.704	-34.665	-34.304	-34.807	-36.131	-35.021	-34.375	-35.908	-34.25	-33.848	-35.344	-34.209	-36.682	-36.936	-34.328	-35.841	-34.078
40	-33.917	-35.297	-34.561	-33.059	-36.657	-34.441	-33.072	-33.259	-34.145	-33.885	-35.006	-33.658	-33.732	-34.401	-34.884	-34.105	-36.749	-34.906	-34.146	-34.98	-36.651	-34.606	-34.677	-33.103	-33.524

TEST ITEM:	CMRR4	CMRR4	CMRR4	Hipot
CONDITION:	60MHz	80MHz	100MHz	50VDC, 6
PIN NO/ FRE.:				
UNIT:	dB	dB	dB	1mA
MAX SPEC:	-30.0	-30.0	-30.0	
MIN SPEC.:				
AVERAGE =	-34.88	-34.46	-33.74	
STD DEV =	1.20	0.66	0.62	
Cpu	1.36	2.24	2.02	
Cpl				
Cpk	1.36	2.24	2.02	
DATA				
31	-36.703	-34.302	-34.306	PASS
32	-36.89	-34.821	-34.31	PASS
33	-34.824	-34.525	-33.277	PASS
34	-33.429	-33.858	-34.313	PASS
35	-33.726	-34.14	-34.237	PASS
36	-35.724	-33.686	-33.776	PASS
37	-33.658	-34.641	-33.889	PASS
38	-34.946	-33.563	-32.232	PASS
39	-35.153	-35.573	-33.534	PASS
40	-33.735	-35.507	-33.524	PASS

## Appendix 19

### Mating/Unmating force test data

<i>Mating/Unmating</i>		
TEST ITEM:	Insertion force	Withdrawal force
PIN NO:	RJ45	RJ45
UNIT:	kg	kg
31#	4.76	1.64
32#	4.17	1.64
33#	4.20	1.53
34#	4.35	1.49
35#	4.30	1.93
36#	4.84	1.75
37#	4.36	1.79
38#	4.75	2.12
39#	4.40	2.05
40#	4.47	1.90



**Appendix 22**  
**JXD0-0001XNL 0hr electrical test data.**

TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	OPSH
CONDITION:	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
PIN NO/ FRE.:	(2),(1),(0)	(3),(1),(0)	(4),(1),(0)	(5),(1),(0)	(6),(1),(0)	(7),(1),(0)	(8),(1)	(9),(1)	(21),(22),(23),(26)	(24),(25)	(27),(28)	(21),(23)	(21),(24)	(21),(27)	(23),(24)	(23),(27)	(24),(27),(1)	(21,22,23)	
UNIT:	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	M
MAX SPEC:	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	165	165	165	165	165	165	15000
MIN SPEC.:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.4	135	135	135	135	135	135	10
AVERAGE =	0.28	0.28	0.27	0.27	0.27	0.28	0.28	0.28	0.86	0.86	0.86	0.86	149.10	149.80	151.20	150.50	151.00	149.00	9987.50
STD DEV =	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.02	2.70	3.25	3.34	3.56	3.44	2.57	37.50
Cpu	25.49	25.46	36.43	39.74	35.44	27.85	55.02	31.51	9.33	10.10	10.19	7.32	1.96	1.56	1.38	1.36	1.36	2.08	44.56
Cpl	8.53	8.61	12.13	13.18	11.71	9.34	18.76	10.57	12.45	13.60	13.55	9.87	1.74	1.52	1.62	1.45	1.55	1.82	88.69
Cpk	8.53	8.61	12.13	13.18	11.71	9.34	18.76	10.57	9.33	10.10	10.19	7.32	1.74	1.52	1.38	1.36	1.36	1.82	44.56
DATA	-----																		
41	0.266	0.283	0.269	0.275	0.275	0.269	0.277	0.271	0.853	0.872	0.862	0.847	149	149	149	152	153	145	10000
42	0.281	0.267	0.272	0.272	0.272	0.283	0.280	0.269	0.875	0.854	0.875	0.844	148	147	155	146	154	150	10000
43	0.284	0.285	0.273	0.279	0.266	0.268	0.278	0.278	0.871	0.861	0.851	0.859	148	153	146	151	146	153	10000
44	0.266	0.282	0.283	0.278	0.283	0.284	0.271	0.279	0.846	0.843	0.854	0.840	149	155	151	153	150	148	9875
45	0.272	0.275	0.273	0.272	0.276	0.277	0.276	0.284	0.845	0.851	0.853	0.875	147	146	148	145	154	153	10000
46	0.281	0.282	0.280	0.270	0.269	0.285	0.278	0.271	0.846	0.869	0.845	0.842	154	150	155	154	154	148	10000
47	0.279	0.271	0.269	0.283	0.268	0.275	0.281	0.277	0.870	0.845	0.841	0.879	149	149	152	154	155	147	10000
48	0.266	0.266	0.273	0.276	0.279	0.267	0.280	0.285	0.849	0.877	0.850	0.852	148	155	154	149	148	150	10000
49	0.281	0.274	0.275	0.268	0.276	0.276	0.283	0.275	0.872	0.851	0.877	0.878	145	148	155	155	145	146	10000
50	0.279	0.284	0.282	0.271	0.275	0.274	0.276	0.269	0.846	0.867	0.859	0.877	154	146	147	146	151	150	10000

TEST ITEM:	OPSH	TRP	TRP	TRP	TRP	LL	LL	LL	LL	OCL	OCL	OCL	OCL	CWW
CONDITION:	RT	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 1mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100kHz, 100mV	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	100mV, 100kHz	1kHz, 1mV
PIN NO/ FRE.:	(9),(10),(2,3)	(21,224,5)	(23,266,7)	(24,258,9)	(27,28)	(3),(21,z)	(5),(23,z)	(7),(24,z)	(9),(27,z21)	(22),(23),(26)	(24),(25),(27)	(28)	(23,24,25)	
UNIT:	M	T	T	T	T	u	u	u	u	u	u	u	u	n
MAX SPEC:	15000	1.02	1.02	1.02	1.02	1	1	1	1	3000	3000	3000	3000	1.3
MIN SPEC.:	10	0.98	0.98	0.98	0.98	0.01	0.01	0.01	0.01	350	350	350	350	0.7
AVERAGE =	9887.90	1.00	1.00	1.00	1.00	0.25	0.22	0.23	0.24	480.80	499.60	490.00	492.30	1.01
STD DEV =	336.30	0.00	0.00	0.00	0.00	0.03	0.03	0.05	0.03	13.74	30.51	34.82	31.67	0.05
Cpu	5.07	11.07	9.95	11.78	13.88	7.30	8.47	5.65	9.82	61.12	27.32	24.03	26.39	1.91
Cpl	9.79	10.01	9.10	10.44	13.34	2.29	2.34	1.59	2.94	3.17	1.63	1.34	1.50	2.10
Cpk	5.07	10.01	9.10	10.44	13.34	2.29	2.34	1.59	2.94	3.17	1.63	1.34	1.50	1.91
DATA														
41	10000	1	1	0.999	1	0.278	0.258	0.295	0.286	468	498	445	499	0.98
42	10000	0.999	0.999	0.998	1	0.241	0.215	0.247	0.253	453	544	515	453	1.04
43	10000	0.999	0.999	0.998	0.999	0.186	0.216	0.194	0.235	484	491	548	477	0.95
44	8879	0.999	0.999	0.999	1	0.198	0.189	0.198	0.225	500	437	530	518	1.06
45	10000	0.999	1	0.999	1	0.242	0.233	0.292	0.203	496	536	519	549	1.04
46	10000	0.999	0.998	0.999	0.999	0.29	0.233	0.188	0.24	473	480	481	490	1.07
47	10000	0.998	1	1	1	0.223	0.184	0.184	0.253	490	492	442	481	1
48	10000	0.999	0.998	0.998	0.999	0.259	0.291	0.186	0.209	470	537	459	484	0.96
49	10000	0.998	0.999	0.999	0.999	0.293	0.201	0.204	0.267	488	488	472	441	1.09
50	10000	1	0.999	0.999	1	0.253	0.226	0.29	0.209	486	493	489	531	0.95

**Appendix 23**  
**JXD0-0001XNL Gorilla Test**



No#: 20201208010

<b>PULSE TEST REPORT</b>			
<b>PRODUCT:</b> JXD0-0001XNL	<b>REVISION:</b> A	<b>DATE:</b> 12/08/2020	<b>PREPARED BY:</b> Jufang Yang

**1. Test Required:**  
Gorilla test

**2. SAMPLE SIZE**  
3 pieces

**3. TEST CONDITION**  
PQ 2.107.099

**4. EQUIPMENT/INSTRUMENT USED:**  
4.1 AMP RJ45 connectors  
4.2 Crimper  
4.3 Cutter  
4.4 CAT 5 round cables  
4.5 Continuity tester

**5 TEST PROCEDURE**

**5.1 Speed set up:**

Adjust the speed to 4 RPM. If there is no speedometer, adjust the speed time until there is 4 complete turn in one minute prior to starting the test. After adjusting the knob, lock it so no one can change.



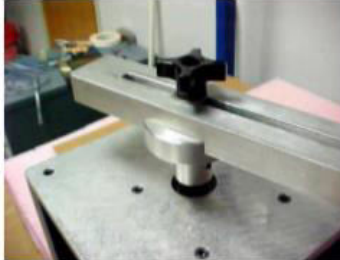
**5.2 Weight cable Set up:**

*Export Process Zone, High-Tech Industrial Development Zone, Mianyang, Sichuan, PR China*  
*TEL#: (86-816)7077888-2012 FAX#(86)816 7077888-1008*

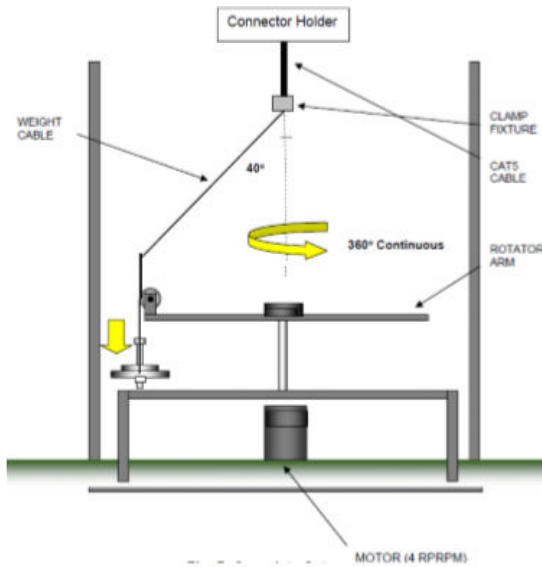
Connect the weight holder to the RJ45 side of the cable. The weight needs to pull the cable not the RJ45 plug.



5.3 While adjusting the arm, fix the angle of the weight cable to perpendicular line from the center of the connector to  $40 \pm 5^\circ$



5.4 The below diagram shows the complete set up of the test fixtures.



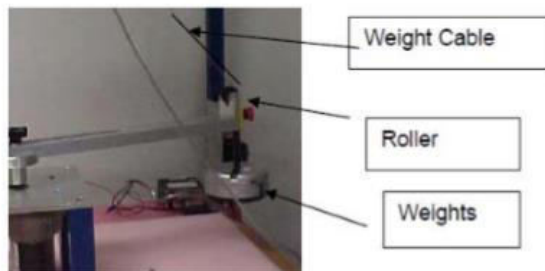
5.5 Place the connector under test into the holder.



5.6 Insert the RJ45 plug into the connector.

5.7 Place the weight on the roller.

The weight should be applied to the cable through the holder at a 40 degree angle



5.8 Apply total of 8 lbs on the weight holder.

5.9 Placing the weight on the roller should be the last action otherwise the connector will be over stressed by applying weight for prolonged amount of time.

5.10 Turn on the knob by pushing it up to rotate the rotator arm 3 complete revolutions at a set speed of 4 RPM. The rotation direction is not important. It could be clockwise or counter clockwise.

5.11 Progress from the over crimped cable up to a under crimped cable (A =.252 in.)

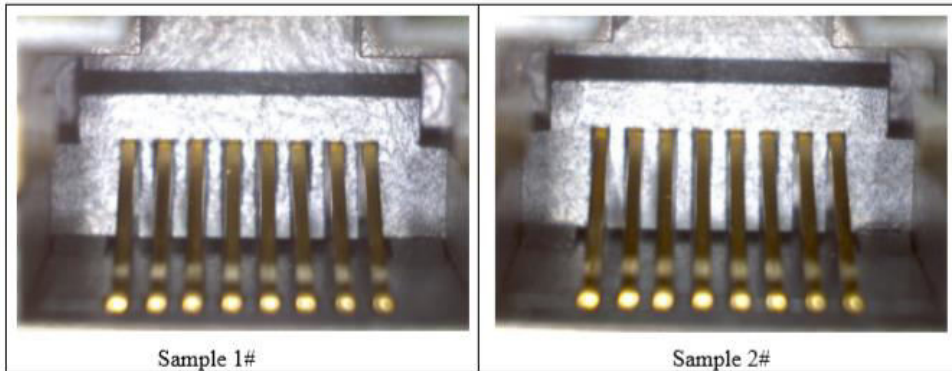
5.12 Testing should be done on all the ports of the connector.

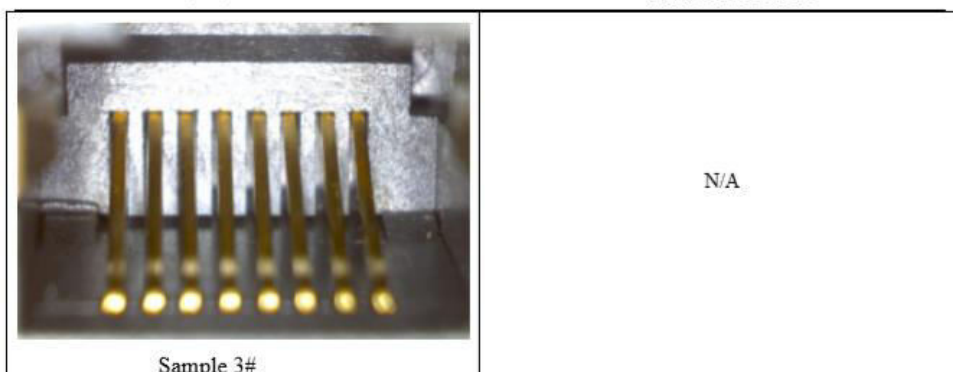
5.13 During the test, the LEDs on the continuity tester need to stay off. If any of them turns ON, it indicates a discontinuity either because of the bent pins, or link to the cable. In either case, the result needs to be verified by repeating the test with a brand new plug.



**6 TEST RESULT**

No disconnection was found, test result: PASS  
The test result figures as below tables.





**Prepared by: Jufang Yang**

**Pulse MPO Lab Technician**

**Reviewed by: Colin Zhang**

**Pulse MPO Lab Engineer**

-----End of the Report-----

## Appendix 24

### JXD0-0001XNL Straight pull test data

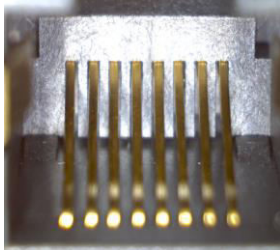
Spec:9Kg/f Min

<b><i>retention force</i></b>	
PIN NO:	RJ45
UNIT:	kg
44#-1	17.945
44#-2	14.64
45#-1	12.69
45#-2	16.41
46#-1	14.05
46#-2	18.03

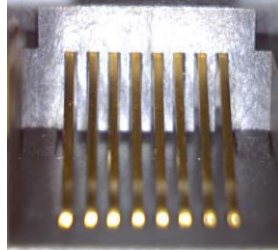


## Appendix 25

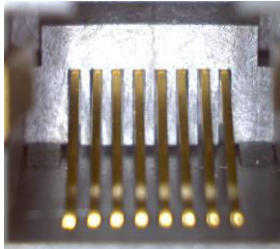
### JXD0-0001XNL RJ45 FCC Terminal Test Pictures



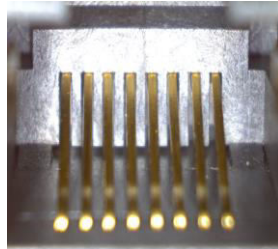
Sample 47# 实验前



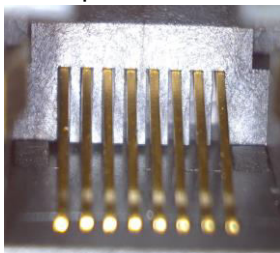
Sample 47# 实验后



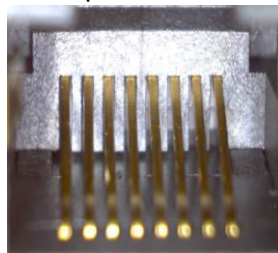
Sample 48# 实验前



Sample 48# 实验后



Sample 49# 实验前



Sample 49# 实验后