



Product Change Notification

PCN Date:	July 7, 2015	
Supplier Name:	Pulse Electronics	
Pulse PCN No.	15-052 REV. A	
Description of Change	<p>Move final product assembly of molding ICM connector from MPO to Pulse contract manufacturer CLY and Smart Jumbo. Both companies are ISO 9000 certified and have been manufacturing molding ICM sub-assembly, LAN discrete product for Pulse.</p> <p>Locations: MPO: Mianyang City, Sichuan, China CLY: Ji'an City, Jiangxi, China Smart Jumbo: Mianyang City, Sichuan, China</p> <p>No change affecting form fit or functions. BOM and manufacturing process remain un-changed.</p>	
Reason for Change	Change in Pulse manufacturing strategy: to consolidate final assembly of molding ICM connector into Pulse contract manufacturer	
Summary of Changes between the new and old part	Present	New
	Sub-assembly manufacturerd in CLY and Smart Jumbo, final product assembly in MPO	CLY and Smart Jumbo to do sub-assembly and final assembly
	There is no change to the form fit or function of the product; same materials, processes and manufacturing controls will be maintained at the receiving location. Only the date code manufacturing designation code will change.	
Traceability guidelines	Factory code to be changed, for example: 1527-CLY or 1527-SV	
Qualification Data attached? File name(s)	Available on request	
Customer Part Number	Pulse Part Number	PCN Effectively Date

	 Part list.xlsx	8/7/2015
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Customer: Generic

Originator: Jose Xu

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Part Number	Phase	Destination CM
J00-0014NL	Phase I	SV
J00-0042NL	Phase I	SV
J00-0045NL	Phase I	SV
J00-0061NL	Phase I	SV
J00-0065NL	Phase I	SV
J00-0066NL	Phase I	SV
J0006D21BNL	Phase I	SV
J0011D01BNL	Phase I	SV
J0011D01NL	Phase I	SV
J0011D21B	Phase I	SV
J0011D21BNL	Phase I	SV
J0011D21NL	Phase I	SV
J0018D21ENL	Phase I	SV
J0026D01BNL	Phase I	SV
J0026D01ENL	Phase I	SV
J0026D21BNL	Phase I	SV
J0026D21ENL	Phase I	SV
J0026D21FNL	Phase I	SV
J0026D21GNL	Phase I	SV
J0026D21NL	Phase I	SV
J0035D21BNL	Phase I	SV
J0037D21NL	Phase I	SV
J0073D01BNL	Phase I	SV
J10-0044NL	Phase I	CLY
J1006F01PNL	Phase I	CLY
J1006F21NL	Phase I	CLY
J1011F01PNL	Phase I	CLY
J1011F21PNL	Phase I	CLY
J1012F01CNL	Phase I	CLY
J1012F21CNL	Phase I	CLY
J1012F21KNL	Phase I	CLY

J1026F01PNL	Phase I	CLY
J1026F21CNL	Phase I	CLY
JX00-0052NL	Phase I	SV
JX00-0226NL	Phase I	SV
JX0011D21BNL	Phase I	SV
JXR0-0011NL	Phase I	SV
JOC-0003NLT	Phase I	SV
JOC-0005NL	Phase I	SV
JOC-0005NLT	Phase I	SV
JOC-0006NL	Phase I	SV
JOC-0006NLT	Phase I	SV
J20-0013NL	Phase II	CLY
J20-0014NL	Phase II	CLY
J00-0063NL	Phase I	SV
J0006D01BNL	Phase I	SV
J0006D21NL	Phase I	SV
J0026D01NL	Phase I	SV
JXR0-0005NL	Phase I	SV
JXR0-0015NL	Phase I	SV
JXR1-0011NL	Phase I	CLY
JXR1-0015NL	Phase I	CLY
J0011D21ENL	Phase I	SV
J0018D21NL	Phase I	SV
J1012F21RNL	Phase I	CLY
J1026F01NL	Phase I	CLY
JX00-0027NL	Phase I	SV
JX10-0061NL	Phase I	CLY
J00-0030NL	Phase I	SV
J0011D11NL	Phase I	SV
J00-0051NL	Phase I	SV
J00-0213NL	Phase I	SV
J0012D21NL	Phase I	SV
JX10-0045NL	Phase I	CLY

JXR0-0001NL	Phase I	SV
JX00-0114NL	Phase I	SV
JX0011D21NL	Phase I	SV
J00-0026NL	Phase I	SV
J10-0015NL	Phase I	CLY
JXR1-0005NL	Phase I	CLY
J10-0065NL	Phase I	CLY
J0026D11NL	Phase I	SV
JX00-0212NL	Phase I	SV
JX0026D21NL	Phase I	SV
J00-0206NL	Phase I	SV
J00-0209NL	Phase I	SV
J10-0070NL	Phase I	CLY
J00-0084NL	Phase I	SV
J2042H3B	Phase II	CLY
J00-0086NL	Phase I	SV
JX0026D21BNL	Phase I	SV
JX10-0315RDNLT	Phase I	CLY
JXR0-0015NLT	Phase II	SV
JXR0-0016NLT	Phase II	SV
JXR1-0005NLT	Phase I	CLY
JX20-0037NL	Phase II	CLY
JXR0-0005NLT	Phase II	SV
JX0C-0005NLT	Phase II	SV
J0011D21BRNL	Phase II	SV
J00-0100NL	Phase II	SV
J10-0034NL	Phase I	CLY
JXR0-0305NLT	Phase II	SV
JXR1-0315NLT	Phase I	CLY
JXR0-0305NL	Phase II	SV
J00-0046NL	Phase I	SV
J00-0061	Phase I	SV
J00-0062NL	Phase I	SV

J00-0216NL	Phase I	SV
J0006D21	Phase I	SV
J0010D11NL	Phase I	SV
J0011D01B	Phase I	SV
J0011D01ENL	Phase I	SV
J0024D21BNL	Phase I	SV
J0026D01FNL	Phase I	SV
J0026D21	Phase I	SV
J0026D21B	Phase I	SV
J0033D21NL	Phase I	SV
J0C-0001NL	Phase I	SV
J0C-0001NLT	Phase I	SV
J0C-0003NL	Phase I	SV
J0C-0004NL	Phase I	SV
J10-0022NL	Phase I	CLY
J10-0025NL	Phase I	CLY
J10-0036NL	Phase I	CLY
J10-0039NL	Phase I	CLY
J10-0040NL	Phase I	CLY
J10-0057NL	Phase I	CLY
J10-0062NL	Phase I	CLY
J1011F01P	Phase I	CLY
J1026F21C	Phase I	CLY
J1511F21	Phase I	CLY
J20-0017NL	Phase II	CLY
J2011H48N	Phase II	CLY
J2045H3ANL	Phase II	CLY
J2045H3BNL	Phase II	CLY
JX00-0027	Phase I	SV
JX0C-0005NL	Phase I	SV
JX10-0060NL	Phase I	CLY
JX10-0315NL	Phase I	CLY
JX10-0315RDNL	Phase I	CLY

JXR0-0001NLT	Phase I	SV
JXR0-0011NLT	Phase I	SV
JXR0-0016NL	Phase I	SV
JXR1-0001NL	Phase I	CLY
JXR1-0001NLT	Phase I	CLY
JXR1-0011NLT	Phase I	CLY
JXR1-0015NLT	Phase I	CLY
JXR1-0315NL	Phase I	CLY

	PULSE TRANSFERRED QUALIFICATION PLAN			
	QUALIFICATION PLAN NUMBER PQ:	PRODUCT: J1012F21KNL	REVISION: A	DATE: 05/28/2015

1.0PURPOSE

This is an internal Pulse Qualification Plan to qualify part number J1012F21KNL which will be transferred to CLY from MPO, 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.

2.0SCOPE

J1012F21KNL product is produced and tested in CLY.

3.0REFERENCES

J1012F21KNL released document

4.0PROCEDURE

4.1 CLY to manufacture 110 units of J1012F21KNL for the qualification tests using released documentation only. 2 units will be used as control units for every test and test intervals. Product to be used in the qualification testing shall meet all the electrical and mechanical specifications per PQ 2.107.001 and PQ 2.107.002 and J1012F21KNL drawing.

4.2 The following tests will be performed at MPO.

TEST GROUP 1 (24 units)

Sequence	Serial #	Test Description	Reference
1	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.000
2	1-24#	Electrical	Test Procedure on TLA
3	1-24#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions
4	1-24#	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
5	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.00
6	1-24#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

7	1-24#	Electrical	Test Procedure on TLA
8	1-24#	Temperature Life	EIA-364-17, Without load, condition 3, (105°C, 1000 hrs)
9	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	1-24#	Electrical	Test Procedure on TLA
11	1-24#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 2 (24 units)

Sequence	Serial #	Test Description	Reference
1	25-48#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	25-48#	Electrical	Test Procedure on TLA
3	25-48#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions
4	25-48#	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
5	25-48#	Visual Inspection	EIA 364-18 and PQ 5.025.00
6	25-48#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	25-48#	Electrical	Test Procedure on TLA
8	25-48#	Thermal Shock	EIA-364-32 condition VIII (-20 to 85°C) , 1 hour/cycle, total 100 Cycles
9	25-48#	Electrical	Test Procedure on TLA
10	25-48#	Temperature Humidity	85RH/85 Deg C for 1,000hrs
11	25-48#	Electrical	Test Procedure on TLA
12	25-48#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 3 (24 units)

Sequence	Serial #	Test Description	Reference
1	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	49-72#	Electrical	Test Procedure on TLA
3	49-72#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions
4	49-72#	Temperature life	EIA-364-17, method A, condition 4 (90C for 360 hours)
5	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00

6	49-72#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	49-72#	Electrical	Test Procedure on TLA
8	49-72#	Mechanical Shock	EIA-364-27, condition A for 3 shocks in each direction (18 total)
9	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	49-72#	Electrical	Test Procedure on TLA
11	49-72#	Vibration	EIA-364-28, condition V, letter C, 2 hrs in each directions
12	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
13	49-72#	Electrical	Test Procedure on TLA
14	49-72#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 4 (18 units)

Sequence	Serial #	Test Description	Reference
1	73-90#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	73-90#	Electrical Test	Test Procedure on TLA
3	73-90#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions
4	73-90#	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
5	73-90#	Solderability Visual Inspection	EIA 364-18 and PQ 5.025.00
6	73-90#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	73-90#	Electrical Test	Test Procedure on TLA
8	73-90#	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.
9	73-90#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	73-90#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
11	73-90#	Electrical Test	Test Procedure on TLA

TEST GROUP 5 (18 units)

Sequence	Serial #	Test Description	Reference
1	91-108#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	91-108#	Electrical Test	Test Procedure on TLA
3	91-97#	Gorilla Test	PQ2.107.099, test 4pcs port Min
4	91-97#	Visual Inspection	EIA 364-18 and PQ 5.025.00
5	91-97#	Electrical Test	Test Procedure on TLA
6	98-103#	Straight pull test	PQ2.107.091, One new sample perform straight pull test to failure, 4pcs port Min.
7	104-108#	RJ45 FCC Terminal Test	PQ2.107.081, Total 10 insertions with 0.262" plug, taking pictures of FCC before and after insertion

5.0 ANALYSIS

5.1 All data and test results are to be collected, compiled and statistically analyzed per PQ 3.024.000 by CM Quality Organization for approval and filing.

5.2 Pulse quality will issue qualification authorization upon successful completion of the qualification plan and data analysis. A decision on the product built and shipment will be made at the 168 hours test interval.


6.0 INTERPRETATION

6.1 Interpretation of the plan is the responsibility of the Pulse Quality Manager

7.0 APPROVAL

Jose Xu
Network User Quality Manager

J1012F21KNL TEST DATA																					
TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR
PIN NO/FRE:	(1),(2),0	(2),(3),0	(4),(5),0	(5),(6),0	(8),(15)	(20),(19)	(13),(14),0	(16),(17),0	(18),(17),0	(18),(20),0	(18),(13),0	(16),(13),0	(20),(13),0	(14),(17),0	(18),(17),0	(20),(17),0	(8),(13),0	(20),(19),0	(18),(15),0	(20),(19),(1,3)	(18),(15),(4,6)
UNIT:	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	n	u	u	n	n
MAX SPEC:	700	700	1	1	1.5	1.5	500	500	160	160	160	160	160	160	160	160	1.25	4000	4000	500	500
MIN SPEC:	10	10	0.001	0.001	0.01	0.01	10	10	140	140	140	140	140	140	140	140	0.75	400	400	10	10
AVERAGE =	439.97	434.54	0.60	0.63	0.87	1.19	116.46	207.43	149.88	150.40	149.29	149.91	149.86	149.49	149.91	150.45	1.00	681.83	613.13	363.25	447.33
STD DEV =	56.60	63.07	0.09	0.07	0.02	0.07	16.30	48.25	1.30	0.68	1.21	2.63	0.78	1.40	1.31	0.89	0.04	52.03	31.17	18.18	10.84
MAX =	579.81	580.52	0.73	0.80	0.95	1.38	140.32	283.93	155.48	153.23	153.73	165.56	153.24	155.24	155.58	155.12	1.09	845.57	697.49	397.44	469.70
MIN =	316.57	306.59	0.23	0.54	0.84	1.11	62.68	130.23	148.79	149.99	148.32	148.44	149.12	148.45	148.81	149.46	0.90	541.22	553.24	325.12	428.44
Cpk Upper limit	1.53	1.40	1.45	1.85	11.21	1.48	7.84	2.02	2.59	4.72	2.94	1.28	4.34	2.51	2.57	3.60	1.86	21.26	36.22	2.51	1.62
Cpk Lower limit	2.53	2.24	2.17	3.10	15.43	5.54	2.18	1.36	2.53	5.11	2.55	1.26	4.22	2.27	2.53	3.93	1.93	1.81	2.28	6.48	13.45
DATA-----																					
1	490.769	580.517	0.601	0.698	0.888	1.131	93.31	190.894	150.547	150.378	150.34	149.658	149.402	149.655	150.549	149.554	1.018	646.137	617.95	373.842	467.02
2	492.906	477.948	0.634	0.612	0.85	1.371	127.5	283.925	149.629	149.987	149.244	149.943	150.086	149.868	149.666	150.451	1.059	664.645	646.133	366.836	428.439
3	443.757	424.526	0.646	0.603	0.889	1.111	127.5	283.925	149.629	149.987	149.244	149.943	150.086	149.868	149.666	150.451	1.059	664.645	646.133	366.836	428.439
4	446.683	424.526	0.646	0.603	0.889	1.111	127.5	283.925	149.629	149.987	149.244	149.943	150.086	149.868	149.666	150.451	1.059	664.645	646.133	366.836	428.439
5	445.376	424.526	0.646	0.603	0.889	1.111	127.5	283.925	149.629	149.987	149.244	149.943	150.086	149.868	149.666	150.451	1.059	664.645	646.133	366.836	428.439
6	440.196	401.732	0.632	0.59	0.886	1.115	118.952	194.889	150.17	150.535	149.095	149.003	149.146	148.907	150.186	150.202	1.059	664.645	646.133	366.836	428.439
7	454.442	407.431	0.61	0.576	0.856	1.15	92.598	280.343	150.148	150.464	149.137	148.946	149.117	149.007	150.172	150.223	1.059	664.645	646.133	366.836	428.439
8	561.285	564.847	0.451	0.623	0.874	1.316	99.72	190.182	149.814	152.265	150.248	149.145	151.488	149.142	149.837	151.013	1.006	588.411	697.175	374.067	431.347
9	579.805	544.903	0.352	0.628	0.854	1.317	103.994	275.224	149.807	152.258	150.269	149.117	151.481	149.178	149.816	151.013	1.005	589.586	697.494	374.793	433.021
10	454.442	433.785	0.734	0.791	0.84	1.336	111.117	185.193	148.995	150.001	148.347	148.497	149.352	148.487	149.011	149.988	0.975	719.64	591.079	336.614	448.975
11	535.643	535.643	0.608	0.668	0.86	1.185	111.117	185.193	148.995	150.001	148.347	148.497	149.352	148.487	149.011	149.988	0.975	719.64	591.079	336.614	448.975
12	433.785	437.347	0.64	0.686	0.868	1.171	99.008	244.037	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
13	413.841	433.073	0.231	0.774	0.953	1.133	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
14	418.827	424.526	0.63	0.59	0.878	1.21511	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
15	406.006	416.69	0.631	0.582	0.875	1.16411	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
16	497.892	503.59	0.531	0.582	0.875	1.16411	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
17	485.07	538.492	0.427	0.582	0.875	1.16411	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
18	332.754	538.492	0.389	0.582	0.875	1.16411	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
19	389.709	538.492	0.519	0.582	0.875	1.16411	140.321	233.855	149.059	150.015	148.318	148.554	149.367	148.53	149.075	150.066	0.975	719.64	591.079	336.614	448.975
20	470.112	418.827	0.681	0.709	0.853	1.116	104.707	173.348	151.252	150.855	150.874	150.904	150.406	150.965	151.261	150.793	1.046	659.119	607.451	369.039	461.994
21	439.484	394.609	0.603	0.638	0.85	1.211	123.938	234.891	151.893	150.869	150.903	152.456	150.42	151.663	151.973	151.497	0.943	655.133	608.4	394.062	430
22	456.579	411.704	0.621	0.575	0.867	1.287	115.391	191.999	153.146	150.898	150.882	150.996	150.449	152.852	153.198	152.715	1.056	658.414	611.166	368.381	457.59
23	470.112	422.389	0.641	0.576	0.868	1.181	105.419	239.907	155.481	150.905	150.889	150.982	150.456	155.237	155.576	155.121	1.053	658.146	610.338	368.74	458.744
24	450.88	399.595	0.64	0.64	0.847	1.383	113.254	227.529	151.615	150.855	150.903	151.025	150.42	151.364	151.631	151.17	1.093	655.887	611.873	370.598	456.627
25	435.21	408.855	0.634	0.578	0.907	1.137	62.881	239.338	151.808	150.898	150.853	151.032	150.442	151.235	151.596	151.134	1.056	658.666	610.772	364.882	455.585
26	456.579	408.855	0.638	0.591	0.858	1.111	99.008	273.953	151.601	150.898	150.882	151.018	150.449	151.292	151.61	151.149	0.911	656.147	609.335	353.125	457
27	321.551	477.948	0.66	0.756	0.891	1.21513	114.679	239.333	149.002	149.994	148.347	149.423	149.338	148.48	149.025	149.974	0.976	829.144	594.212	380.614	441.87
28	316.565	318.702	0.682	0.664	0.887	1.261	120.377	248.088	149.023	150.029	148.354	149.715	149.359	148.494	149.054	150.002	0.981	728.491	593.201	372.328	443.385
29	321.551	306.593	0.699	0.657	0.87	1.237	109.693	208.853	149.002	150.015	148.368	149.679	149.352	148.516	149.011	150.009	0.978	694	591.553	371.732	442.126
30	546.327	502.165	0.692	0.797	0.856	1.117	95.447	211.425	149.216	150.015	148.361	148.54	149.367	148.729	149.239	150.259	0.982	697.94	593.261	372.921	445.131
31	532.794	516.411	0.683	0.781	0.862	1.285	99.72	235.21	149.144	150.001	148.354	148.561	149.359	148.658	149.175	150.159	0.981	698.315	593.214	373.78	446.446
32	417.403	445.894	0.611	0.644	0.876	1.238	118.952	239.333	149.394	149.994	148.34	154.99	149.331	149.035	149.481	150.429	0.982	701.474	593.086	369.379	443.311
33	416.69	429.512	0.6	0.621	0.879	1.21	105.419	232.234	149.28	150.036	148.347	149.174	149.381	148.786	149.317	150.323	0.981	698.355	592.539	374.2	440.785
34	482.933	437.347	0.609	0.639	0.879	1.118	96.159	198.045	149.408	150.022	148.318	148.533	149.374	148.865	149.417	150.437	0.98	845.569	592.888	359.214	443.119
35	442.333	412.417	0.611	0.728	0.862	1.116	121.089	189.3	149.401	150.008	148.354	165.556	149.367	148.936	149.438	150.422	0.901	541.219	553.242	363.678	462.132
36	432.361	381.076	0.633	0.588	0.863	1.187	117.528	133.911	148.952	150.036	148.361	148.462	149.381	148.494	148.99	149.981	0.982	698.985	595.151	359.621	463.928
37	432.361	378.227	0.63	0.582	0.863	1.187	111.829	141.034	148.931	150.029	148.361	148.44	149.402	148.466	148.969	150.009	0.981	699.653	595.368	360.45	442.076
38	430.224	394.609	0.616	0.581	0.876	1.167	111.829	152.43	148.952	150.029	148.347	148.469	149.381	148.445	148.997	149.988	0.981	700.66	594.992	381.244	451.989
39	443.757	387.487	0.63	0.606	0.866	1.187	136.047	141.034	148.959	150.022	148.333	148.454	149.374	148.48	148.983	149.967	0.979	701.017	594.823	371.	

	PULSE TRANSFERRED QUALIFICATION PLAN			
	QUALIFICATION PLAN NUMBER PQ:	PRODUCT: J00-0065NL	REVISION: A	DATE: 05/28/2015

1.0 PURPOSE

This is an internal Pulse Qualification Plan to qualify part number J00-0065NL which will be transferred to SV from MPO, 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.

2.0 SCOPE

J00-0065NL product is produced and tested in SV.

3.0 REFERENCES

J00-0065NL released document

4.0 PROCEDURE

4.1 SV to manufacture 110 units of J00-0065NL for the qualification tests using released documentation only. 2 units will be used as control units for every test and test intervals. Product to be used in the qualification testing shall meet all the electrical and mechanical specifications per PQ 2.107.001 and PQ 2.107.002 and J00-0065NL drawing.

4.2 The following tests will be performed at MPO.

TEST GROUP 1

Sequence	Serial #	Test Description	Reference
1	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.000
2	1-24#	Electrical	Test Procedure on TLA
3	1-24#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions
4	1-24#	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
5	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.00
6	1-24#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

7	1-24#	Electrical	Test Procedure on TLA
8	1-24#	Temperature Life	EIA-364-17, Without load, condition 3, (105°C, 1000 hrs)
9	1-24#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	1-24#	Electrical	Test Procedure on TLA
11	1-24#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 2

Sequence	Serial #	Test Description	Reference
1	25-48#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	25-48#	Electrical	Test Procedure on TLA
3	25-48#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions
4	25-48#	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
5	25-48#	Visual Inspection	EIA 364-18 and PQ 5.025.00
6	25-48#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	25-48#	Electrical	Test Procedure on TLA
8	25-48#	Thermal Shock	EIA-364-32 condition VIII (-20 to 85°C) , 1 hour/cycle, total 100 Cycles
9	25-48#	Electrical	Test Procedure on TLA
10	25-48#	Temperature Humidity	85RH/85 Deg C for 1,000hrs
11	25-48#	Electrical	Test Procedure on TLA
12	25-48#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 3

Sequence	Serial #	Test Description	Reference
1	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	49-72#	Electrical	Test Procedure on TLA
3	49-72#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60,50 insertions
4	49-72#	Temperature life	EIA-364-17, method A, condition 4 (90C for 360 hours)
5	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00

6	49-72#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	49-72#	Electrical	Test Procedure on TLA
8	49-72#	Mechanical Shock	EIA-364-27, condition A for 3 shocks in each direction (18 total)
9	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	49-72#	Electrical	Test Procedure on TLA
11	49-72#	Vibration	EIA-364-28, condition V, letter C, 2 hrs in each directions
12	49-72#	Visual Inspection	EIA 364-18 and PQ 5.025.00
13	49-72#	Electrical	Test Procedure on TLA
14	49-72#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4

TEST GROUP 4

Sequence	Serial #	Test Description	Reference
1	73-90#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	73-90#	Electrical Test	Test Procedure on TLA
3	73-90#	Pre-wear (Durability)	EIA-364-09, GR-1217 5.2.5 R5-60, 50 insertions
4	73-90#	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
5	73-90#	Solderability Visual Inspection	EIA 364-18 and PQ 5.025.00
6	73-90#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
7	73-90#	Electrical Test	Test Procedure on TLA
8	73-90#	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.
9	73-90#	Visual Inspection	EIA 364-18 and PQ 5.025.00
10	73-90#	Mating /Unmating force	EIA-364-13, GR-1217, 5.1.5, Mating 5 lbs Max. Unmating 5 lbs Max, test port1 to port4
11	73-90#	Electrical Test	Test Procedure on TLA

TEST GROUP 5

Sequence	Serial #	Test Description	Reference
1	91-108#	Visual Inspection	EIA 364-18 and PQ 5.025.00
2	91-108#	Electrical Test	Test Procedure on TLA
3	91-97#	Gorilla Test	PQ2.107.099, test 4pcs port Min
4	91-97#	Visual Inspection	EIA 364-18 and PQ 5.025.00
5	91-97#	Electrical Test	Test Procedure on TLA
6	98-103#	Straight pull test	PQ2.107.091, One new sample perform straight pull test to failure, 4pcs port Min.
7	104-108#	RJ45 FCC Terminal Test	PQ2.107.081, Total 10 insertions with 0.262" plug, taking pictures of FCC before and after insertion

5.0 ANALYSIS

5.1 All data and test results are to be collected, compiled and statistically analyzed per PQ 3.024.000 by CM Quality Organization for approval and filing.

5.2 Pulse quality will issue qualification authorization upon successful completion of the qualification plan and data analysis. A decision on the product built and shipment will be made at the 168 hours test interval.

6.0 INTERPRETATION

6.1 Interpretation of the plan is the responsibility of the Pulse Quality Manager

7.0 APPROVAL

Jose Xu
Network User Quality Manager

J00-0065NL TEST DATA																										
TEST ITEM:	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	DCR	CWW	LL	LL	OCL	OCL		
PIN NO/FRE.:	(1),(4),0	(3),(5),0	(1),(2),0	(3),(6),0	(16),(17),0	(19),(20),0	(15),(18),0	(13),(14),0	(13),(15),0	(17),(20),0	(16),(19),0	(13),(16),0	(13),(19),0	(15),(16),0	(15),(19),0	(9),(10),0	(12),(11),0	(8),(20),0	(13),(14),1,2	(15),(18),3,6	(13),(14),0	(15),(18),0				
UNIT:	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	n	u	u	u	u		
MAX SPEC.:	400	400	800	800	300	300	1	1	165	165	165	165	165	165	165	5	5	1.4	1.4	1	1	3500	3500			
MIN SPEC.:	1	1	1	1	1	1	0.001	0.001	135	135	135	135	135	135	135	1	1	0.7	0.7	0.01	0.01	350	350			
AVERAGE =	275.99	277.63	557.43	549.85	77.05	77.32	0.56	0.57	150.21	149.15	149.13	149.91	149.80	149.79	149.46	4.42	4.21	1.04	1.04	0.59	0.68	627.91	632.59			
STD DEV =	22.70	28.68	38.21	37.49	2.15	5.03	0.03	0.05	0.91	1.14	1.14	1.09	1.00	1.06	0.93	0.14	0.08	0.03	0.05	0.05	0.05	40.62	40.50			
MAX	326.12	358.37	714.82	637.19	83.25	90.81	0.62	0.80	152.15	151.58	151.54	152.51	151.66	152.42	151.53	4.69	4.40	1.17	0.67	0.76	0.76	706.96	707.38			
MIN	229.82	237.57	486.42	487.12	73.64	69.63	0.50	0.50	148.25	147.14	147.09	147.96	147.04	147.94	147.62	4.24	4.11	0.98	0.50	0.59	0.59	531.94	525.85			
Cpk Upper limit	1.82	1.42	2.12	2.22	34.64	14.76	5.22	2.67	5.42	4.65	4.65	4.63	5.13	4.77	5.56	1.36	3.47	3.93	2.63	2.22	2.37	23.57	23.60			
Cpk Lower limit	4.04	3.21	4.85	4.88	11.82	5.06	6.62	3.57	5.57	4.15	4.14	4.58	4.86	4.64	5.18	7.96	14.19	3.76	3.70	4.67	2.28	2.33				
DATA-----																										
1	253.01	307.48	547.6	573.4	78.032	71.13	0.552	0.587	149.343	148.197	148.204	148.176	148.841	148.677	149.285	4.263	4.268	1.014	0.646	0.746	618.22	629.037				
2	313.22	313.22	562.65	634.32	78.58	73.635	0.57	0.558	151.218	148.333	148.262	149.958	150.381	149.128	149.607	4.277	4.199	1.033	0.635	0.748	632.059	625.905				
3	279.53	323.25	592.03	623.57	79.677	71.076	0.52	0.546	150.087	148.283	148.219	150.395	149.836	148.448	147.889	4.231	1.028	0.603	0.706	648.371	641.725					
4	273.8	286.7	566.95	554.76	80.172	72.915	0.586	0.598	151.662	149.894	149.872	150.968	151.118	150.416	150.524	4.27	4.229	1.044	0.656	0.721	557.419	664.414				
5	254.45	240.83	558.35	487.39	80.494	73.839	0.567	0.595	148.247	148.526	148.541	148.376	148.018	148.756	148.333	4.277	4.212	1.009	0.654	0.727	555.822	585.388				
6	260.9	253.73	589.88	525.38	78.57	72.431	0.498	0.557	150.237	149.099	149.035	149.271	149.264	149.973	149.98	4.27	4.245	1.052	0.634	0.727	622.557	659.193				
7	326.12	319.67	588.45	606.37	76.538	72.441	0.545	0.555	149.529	150.817	150.753	151.075	149.471	150.882	149.292	4.284	4.219	1.024	0.64	0.738	674.85	662.397				
8	294.58	303.18	539.71	584.15	79.215	74.205	0.616	0.619	150.137	148.884	148.899	151.34	149.271	149.743	147.624	4.295	4.27	1.042	0.668	0.761	637.235	677.721				
9	269.5	311.07	541.86	588.45	80.086	72.958	0.562	0.572	149.607	147.818	147.739	149.593	147.037	150.352	147.811	4.33	4.206	1.1	0.622	0.732	617.764	615.662				
10	309.64	285.27	594.18	553.33	78.881	72.753	0.504	0.575	152.07	149.493	149.507	150.524	150.874	150.66	150.982	4.254	4.18	1.013	0.617	0.693	705.698	679.691				
11	270.21	266.63	574.83	538.99	78.58	73.194	0.509	0.544	150.023	148.534	148.548	149.629	149.987	148.562	148.884	4.272	4.235	1.051	0.638	0.675	669.014	666.9				
12	295.3	301.03	560.5	568.38	77.935	72.839	0.58	0.627	150.588	150.094	150.094	151.311	150.703	149.98	149.292	4.27	4.171	1.039	0.628	0.705	622.528	612.49				
13	274.51	358.37	588.45	637.19	76.935	71.581	0.557	0.59	150.803	149.715	149.708	150.567	149.743	150.738	149.922	4.293	4.265	1.03	0.663	0.739	592.495	630.488				
14	308.2	311.79	576.26	593.47	80.322	73.269	0.509	0.554	151.877	148.62	148.627	150.166	149.844	150.631	150.323	4.277	4.208	1.023	0.614	0.681	634.221	599.361				
15	296.02	339.02	549.03	603.5	74.645	69.625	0.542	0.537	148.977	147.138	147.088	148.04	148.176	147.939	148.118	4.325	4.277	0.992	0.625	0.732	613.214	684.807				
16	288.13	265.2	531.11	554.05	77.581	73.194	0.56	0.563	152.006	149.106	149.042	150.975	151.053	150.051	150.166	4.3	4.206	1.033	0.642	0.735	691.089	622.254				
17	270.21	315.37	576.98	571.25	76.785	72.721	0.532	0.563	149.708	149.343	149.371	149.078	149.786	149.271	149.937	4.286	4.261	1.003	0.653	0.736	608.776	699.683				
18	287.42	325.4	581.28	615.69	76.312	72.119	0.573	0.58	150.474	150.688	150.703	151.018	151.111	149.987	150.13	4.302	4.208	1.04	0.652	0.719	669.661	671.227				
19	259.46	265.2	577.7	534.69	76.935	71.979	0.55	0.646	149.328	148.591	148.598	149.393	148.498	149.407	148.491	4.279	4.212	1.064	0.659	0.688	634.019	568.789				
20	263.05	253.01	541.86	517.49	79.419	74.119	0.55	0.611	150.144	148.011	147.982	148.04	149.235	148.863	150.058	4.286	4.238	1.03	0.657	0.735	678.347	707.377				
21	306.77	292.43	617.84	586.3	78.989	73.13	0.56	0.546	149.586	148.612	148.562	149.264	148.605	149.586	148.913	4.3	4.173	0.975	0.651	0.755	637.271	635.458				
22	306.05	306.05	576.98	589.88	77.409	70.926	0.558	0.584	149.665	147.982	147.982	147.961	148.147	149.471	149.658	4.24	4.194	1.033	0.614	0.74	613.585	694.718				
23	263.76	263.76	584.87	551.9	80.118	73.517	0.559	0.578	149.486	150.817	150.724	151.254	149.4	150.853	149.006	4.309	4.247	1.172	0.617	0.729	582.79	550.623				
24	304.62	279.53	599.2	595.62	80.096	72.538	0.505	0.531	150.466	148.92	148.849	149.65	150.094	149.214	149.679	4.281	4.187	1.044	0.625	0.704	656.876	575.153				
25	252.37	271.41	528.72	519.55	75.772	81.676	0.563	0.797	150.407	148.934	148.932	149.86	149.184	150.23	149.525	4.546	4.22	1.038	0.542	0.646	535.105	540.236				
26	257.31	267.88	520.96	527.31	74.936	79.889	0.592	0.555	149.669	150.531	150.551	150.711	151.661	148.647	149.581	4.478	4.116	1.045	0.538	0.648	690.117	645.272				
27	279.16	284.8	533.65	512.5	75.571	80.988	0.554	0.775	150.569	147.85	147.835	149.642	150.26	148.161	148.828	4.538	4.36	1.062	0.504	0.588	596.922	657.341				
28	250.26	253.78	518.85	533.65	75.169	81.57	0.531	0.593	150.59	147.984	147.989	149.867	149.099	149.562	148.8	4.665	4.184	1.047	0.558	0.64	663.819	601.012				
29	272.11	271.41	573.83	540	75.296	80.407	0.599	0.567	149.83	148.681	148.686	150.064	149.55	149.062	148.554	4.663	4.372	1.038	0.529	0.615	613.363	624.068				
30	245.32	263.65	494.17	528.72	74.926	82.934	0.59	0.571	148.838	148.695	148.707	148.164	149.303	148.344	149.441	4.582	4.36	1.054	0.52	0.63	657.503	628.283				
31	265.06	252.37	504.04	516.73	75.909	80.438	0.574	0.545	150.175	148.265	148.257	149.445	148.804	149.745	149.011	4.439	4.189	1.071	0.529	0.647	630.822	626.141				
32	244.62	262.95	714.82	538.59	75.423	82.405	0.581	0.56	151.498	149.814	149.812	151.873	149.81	151.687	149.567	4.547	4.195	1.047	0.517	0.635	582.014	646.542				
33	256.6	237.57	530.83	487.12	74.027	81.052	0.597	0.51	150.274	151.277	151.255	152.506	150.26	151.377	149.138	4.677	4.11	1.006	0.542	0.654	597.477	585.681				
34	284.8	265.06	564.67	527.31	75.402	80.449	0.564	0.54	151.737	148.603	148.566	151.366	150.162	150.265	149.053	4.49	4.177	0.988	0.51	0.622	706.956	652.874				
35	280.57	281.98	562.55	544.93	73.636	80.756	0.523	0.502	149.176	151.517	151.501	149.388	151.049	149.709	151.376	4.544	4.168	1.028	0.542	0.63	561.934	603.928				
36	277.75	245.32	537.88	515.32	74.683	80.639	0.585	0.538	150.612	149.243	149.214	150.198	148.494	151.391	149.722	4.492	4.137	1.034	0.563	0.668	531.937	525.85				
37	294																									