

08 Oct 2010

[CCB 956: Qualification of 8L, 14L, & 16L PDIP at GTK \(GRTK\) assembly site.](#)

PCN Status:

Final notification

Microchip Part#s Affected:

See attachments of Affected Part Numbers Labeled as...

[PCN_CYER-19VUXW601_Affected_CPN.xls](#)

[PCN_CYER-19VUXW601_Affected_CPN.pdf](#)

Description of Change:

Qualification of 8L, 14L, & 16L PDIP at GTK (GRTK) assembly site.

Impacts to Data Sheet:

None

Reason for Change:

To improve on-time delivery performance,

Change Implementation Status:

In Progress

Estimated First Ship Date:

November 5, 2010 (Date code 1045)

NOTE: Please be advised that during the transition period customers may receive pre and post change parts, due to existing inventory of the pre changed parts.

Markings to Distinguish Revised from Unrevised Devices: (e.g.: Date Code, Device Marking, Ship Container Marking)

Traceability code

Attachments:

[PCN_CYER-19VUXW601_Affected_CPN.pdf](#)

[PCN_CYER-19VUXW601_Affected_CPN.xls](#)

[PCN_CYER-19VUXW601_Qual Report.pdf](#)

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A Leading Provider of Microcontrollers & Analog Semiconductors

Product Change Notification - CYER-19VUXW601

Date: 08 Oct 2010

Product Category: Memory; RF and Security; Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface; Touch Sensing Technologies; Radio Frequency Devices; 8-bit Microcontrollers; All 16-bit Microcontrollers

Device Family: 

Notification subject: CCB 956: Qualification of 8L, 14L, & 16L PDIP at GTK (GR TK) assembly site.

Notification text: PCN Status:
Final notification

Microchip Part#s Affected:
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Parts Affected

11AA010
11AA020
11AA040
11AA080
11AA160
11LC010
11LC020
11LC040
11LC080
11LC160
23A256
23A640
23K256
23K640
24AA00
24AA01
24AA014
24AA014H
24AA01H
24AA02
24AA024
24AA024H
24AA025
24AA02H
24AA04
24AA04H
24AA08
24AA08H
24AA1025
24AA128
24AA16
24AA16H
24AA256
24AA32A
24AA32AF
24AA512
24AA515
24AA52
24AA64
24AA64F
24AA65
24C00
24C01C
24C02C

24C65
24FC1025
24FC128
24FC256
24FC512
24FC515
24FC64
24LC00
24LC014
24LC014H
24LC01B
24LC01BH
24LC024
24LC024H
24LC025
24LC02B
24LC02BH
24LC04B
24LC04BH
24LC08B
24LC08BH
24LC1025
24LC128
24LC16B
24LC16BH
24LC21
24LC21A
24LC22A
24LC256
24LC32A
24LC32AF
24LC512
24LC515
24LC64
24LC64F
24LC65
24LCS21A
24LCS22A
24LCS52
24VL014
24VL014H
24VL024
24VL024H
24VL025
25AA010A
25AA020A

25AA040
25AA040A
25AA080
25AA080A
25AA080B
25AA080C
25AA080D
25AA1024
25AA128
25AA160
25AA160A
25AA160B
25AA160C
25AA160D
25AA256
25AA320
25AA320A
25AA512
25AA640
25AA640A
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25LC512
25LC640
25LC640A

34AA02
34LC02
34VL02
93AA46
93AA46A
93AA46B
93AA46C
93AA56
93AA56A
93AA56B
93AA56C
93AA66A
93AA66B
93AA66C
93AA76
93AA76C
93AA86C
93C46A
93C46B
93C46C
93C56A
93C56B
93C56C
93C66A
93C66B
93C66C
93C86
93C86C
93LC46
93LC46A
93LC46B
93LC46C
93LC56
93LC56A
93LC56B
93LC56C
93LC66
93LC66A
93LC66B
93LC66C
93LC76
93LC76C
93LC86C
HCS101
HCS200
HCS201

HCS300
HCS301
HCS320
HCS360
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HCS362
HCS365
HCS370
HCS410
HCS500
HCS515
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MCP1404
MCP1405
MCP1406
MCP1407
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MCP14E4
MCP14E5
MCP1525
MCP1541
MCP201
MCP2021
MCP2022
MCP2030
MCP2036
MCP2120
MCP2122
MCP25020
MCP25025
MCP25050
MCP25055
MCP2551
MCP3001
MCP3002
MCP3004
MCP3008
MCP3201
MCP3202
MCP3204
MCP3208
MCP3221
MCP3301
MCP3302
MCP3304
MCP4011

MCP41010
MCP41050
MCP41100
MCP4131
MCP4132
MCP4141
MCP4142
MCP4151
MCP4152
MCP4161
MCP4162
MCP42010
MCP42050
MCP42100
MCP4231
MCP4241
MCP4251
MCP4261
MCP4821
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MCP4922
MCP6002
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MCP6144

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PIC10F206

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PIC12CE518
PIC12CE519
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PIC12CE674
PIC12CR509A
PIC12F508
PIC12F509
PIC12F510
PIC12F519
PIC12F609
PIC12F615
PIC12F617
PIC12F629
PIC12F635
PIC12F675
PIC12F683
PIC16C505
PIC16F505
PIC16F506
PIC16F526
PIC16F610
PIC16F616
PIC16F630
PIC16F636
PIC16F676
PIC16F684
PIC16F688
PIC24F04KA200
RE46C100
RE46C101
RE46C104
RE46C105
RE46C107
RE46C108
RE46C109
RE46C112
RE46C114
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RE46C145
RE46C152
RE46C162
RE46C163
RE46C165
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TC1413N
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TC1428
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TC3402
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TC4405

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TC4423
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TC4428A
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TC4432
TC4451
TC4452
TC4467
TC4468
TC4469
TC4626
TC4627
TC500
TC500A
TC520A
TC620
TC621
TC622
TC623
TC624
TC642
TC642B
TC646
TC646B
TC647
TC647B
TC648
TC648B
TC649
TC649B
TC682

TC7650
TC7652
TC7660
TC7660H
TC7660S
TC7662A
TC7662B
TC9400
TC9401
TC9402
TC962



MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN#: CYER-19VUXW601

Date
October 04, 2010

**Qualification of 16L PDIP at GTK (GR TK) assembly site. The 8L and 14L
PDIP qualify by similarity.**

Distribution

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MICROCHIP PACKAGE QUALIFICATION REPORT

| | |
|-----------------------------------|--|
| Purpose | Qualification of 16L PDIP at GTK (GRTK) assembly site. The 8L and 14L PDIP will qualify by similarity. |
| CN | BC101991 |
| QUAL ID | Q10086 |
| Part No. | TC3401VPE |
| MP CODE | Y4AH29D6XA00 |
| Bonding No. | A-025919 Rev. C |
| CCB No. | 956 |
| <u>Package</u> | |
| Type | 16L PDIP |
| Package size | 300 mils |
| Die thickness | 15 mils |
| Die size | 75.00 x 115.00 mils |
| <u>Lead Frame</u> | |
| Paddle size | 110 x 140 mils |
| Material | C194 / NINGBO KANGQIANG (China) |
| Surface | Bare Cu |
| Process | Stamped |
| Lead Lock | Yes |
| Part Number | 11-01016-001 |
| <u>Die attach material</u> | |
| Epoxy | CRM1076DJ-G / Sumitomo (Japan) |
| Wire | Au wire / Sumitomo (Japan) |
| Mold Compound | G600F / Sumitomo (Taiwan) |
| Plating Composition | Matte Tin |



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

| Assembly Lot No. | Wafer Lot No. | Trace Code |
|------------------|-------------------|------------|
| GTK-112000001 | AMI-910021626.200 | 10332QD |
| GTK-112000002 | AMI-910021626.200 | 10332QS |
| GTK-112000003 | AMI-910021626.200 | 10332QU |

Result Pass Fail _____

16L PDIP (.300") assembled by GTK pass reliability test per QCI-39000.

Prepared By: _____ **Date:** October 04, 2010 **(Reliability Engineer)**

(Mr. Udom Suksansakul)

Approved By: _____ **Date:** October 04, 2010 **(Reliability Manager)**

(Mr. Surasit Phurikhup)

PACKAGE QUALIFICATION REPORT

| Test Number (Reference) | Test Condition | Microchip Spec | Qty. (Acc.) | Date in | Date Out | Def/SS. | Result | Remarks |
|----------------------------|---|--------------------|----------------|----------|----------|---------|--------|---|
| Electrical Test | Electrical Test : +25°C and 85°C System: TTS1000 | S12/14/16 (PDC) | 693(0) | 08/27/10 | 09/04/10 | 693 | | Good Devices |
| Temp Cycle | Stress Condition: -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Inspection: External crack inspection all units under 40X Optical magnification | PI-91020B | | 09/06/10 | 09/18/10 | 231 | | |
| | Electrical Test: +85°C System: TTS1000 | QCI-33003 | 30(0) | 09/18/10 | 09/18/10 | 0/30 | | |
| | | S12/14/16 (PDC) | 231(0) | 09/18/10 | 09/24/10 | 0/231 | Pass | 77 units / lot |
| | Bond Strength: Bond Shear (10.90 grams) Wire Pull (> 3 grams) | QCI-91022 | 15 (0) | 09/24/10 | 09/24/10 | 0/15 | Pass | Wire pull & bond shear after Temp Cycle |
| | | | 15 (0) | 09/24/10 | 09/24/10 | 0/15 | Pass | |
| Pressure Cooker | Stress Condition: +121°C, 100% RH, 15 PSI, 96 hrs. System: HIRAYAMA TPC-422R | PI-92013B | | 09/06/10 | 09/10/10 | 231 | | |
| | Electrical Test: +25°C System: TTS1000 | S12/14/16 (PDC) | 231(0) | 09/10/10 | 09/14/10 | 0/231 | Pass | 77 units / lot |

PACKAGE QUALIFICATION REPORT

| Test Number (Reference) | Test Condition | Microchip Spec | Qty. (Acc.) | Date in | Date Out | Def/SS. | Result | Remarks |
|----------------------------|--|---|----------------|--|--|--------------------------|--------|--------------------|
| HAST | <p>Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X</p> <p>Electrical Test: +25°C and 85°C System: TTS1000</p> | <p>PI-92010B</p> <p>S12/14/16 (PDC)</p> | 231(0) | 09/09/10 09/13/10 | 09/13/10 09/17/10 | 231 0/231 | Pass | 77 units / lot |
| Solderability | <p>Steam Aging: Temp 93°C, 8Hrs System: SAS-3000</p> <p>Solder Dipping: Solder Temp. 245°C System: ERSA RA 2200D</p> <p>Visual Inspection: External Visual Inspection</p> | QCI-31003 | 22 (0) | 09/30/10 10/01/10 10/01/10 | 10/01/10 10/01/10 10/01/10 | 22 22 0/22 | Pass | |
| Physical Dimensions | Physical Dimension, 30 units from 1 lot | QCI-30017 | 30(0) Units | - | - | 0/30 | Pass | Physical Dimension |
| Lead Integrity | 45 Leads from a minimum of 5 units, 1 lot. System: Strain | QCI-31004 | 45(0) Leads | 09/07/10 | 09/07/10 | 0/45 | Pass | |

PACKAGE QUALIFICATION REPORT

| Test Number (Reference) | Test Condition | Microchip Spec | Qty. (Acc.) | Date in | Date Out | Def/SS. | Result | Remarks |
|--|---|---------------------------------|-----------------|----------|----------|---------|--------|--|
| High Temperature Storage Life | Stress Condition: Bake 150°C, 504 hrs System: CHINEE | PI-92014B S12/14/16 (PDC) | 45(0) | 09/06/10 | 09/30/10 | 45 | Pass | 45 units |
| | Electrical Test: +25°C and 85°C System: TTS1000 | | | 09/30/10 | 09/25/10 | 0/45 | Pass | |
| Bond Strength Data Assembly | Bond Shear (10.90 grams) | | 30 (0) bonds | - | - | 0/30 | Pass | Wire pull & bond shear data assembly |
| | Wire Pull (> 3 grams) | QCI-91022 | 30 (0) wires | - | - | 0/30 | Pass | |