

PCN # 1998A

DATE: April 14, 2020

EXPECTED PCN SHIP DATE: April 14, 2020



Quality Assurance  
160 Rio Robles  
San Jose, CA 95134

www.maximintegrated.com

PROCESS CHANGE NOTICE

PRODUCT CHANGE NOTICE

MAXIM INTEGRATED HEREBY ISSUES NOTIFICATION OF CHANGE  
THAT MAY AFFECT THE FOLLOWING CATEGORIES:

<input type="checkbox"/> DESIGN	<input type="checkbox"/> WAFER FAB	<input checked="" type="checkbox"/> ASSEMBLY	<input type="checkbox"/> TEST	<input type="checkbox"/> ELEC/MECH SPECS
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AFFECTED PRODUCT:

Ordering P/N: (See PN listing XLS in PCN ZIP file)
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CHANGE FROM: - Maxim commercial products in TO92 package manufactured at current subcontractor CIRTEK/PHILIPPINES	CHANGE TO: - Additional Assembler Greatek in Taiwan/R.O.C.
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JUSTIFICATION: - Maxim has selected Greatek to expand assembly capacity. This new partnership will enhance Maxim's Supply-Chain to meet capacity demands, flexibility and on-time delivery. Greatek is an established assembly subcontractor and is certified under QS 9000, ISO/TS 16949, ISO 14001. Qualification results are reflected in Maxim's Reliability report attached (R25715). There are no regulatory compliance changes to the material content of the devices. There are no changes to the form, fit, function of the devices.
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TRACEABILITY: Maxim Integrated maintains full traceability by device marking, packaging labels and shipment documents.
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Maxim Integrated's Change Notification System is designed to keep our customer base apprised of major product, manufacturing, or facility improvements.

*Nasser Ali Chaouche*

Nasser AliChaouche / PCN Coordinator

For further information, please contact either of the people listed below.

Contact your local Maxim Integrated Company Representative or Nasser AliChaouche, PCN Coordinator  
408-601-5660 / pcn.coordinator@maximintegrated.com

Affected product numbers	Customer part number	PCN Proposed Ship Date
DS1233D-10+		14-Apr-20
DS1233D-10+T&R		14-Apr-20
DS1233M-5+		14-Apr-20
DS1233M-5+T&R		14-Apr-20
DS1810-5+		14-Apr-20
DS1810-5+T&R		14-Apr-20
DS1811-15+		14-Apr-20
DS1811-15+T&R		14-Apr-20
DS1812-15+		14-Apr-20
DS1812-15+T&R		14-Apr-20
DS1813-15+		14-Apr-20
DS1813-15+T		14-Apr-20
DS1815-10+		14-Apr-20
DS1815-10+T&R		14-Apr-20
DS1815-20+		14-Apr-20
DS1816-10+		14-Apr-20
DS1818-5+		14-Apr-20
DS1818-5+T&R		14-Apr-20
DS1822+		14-Apr-20
DS1822+PAR		14-Apr-20
DS18B20+		14-Apr-20
DS18B20+CKJ		14-Apr-20
DS18B20+CNH		14-Apr-20
DS18B20+PAR		14-Apr-20
DS18B20+T&R		14-Apr-20
DS18B20-SL+T&R		14-Apr-20
DS18B20/GG8		14-Apr-20
DS18S20+		14-Apr-20
DS18S20+PAR		14-Apr-20
DS18S20+T&R		14-Apr-20
DS18S20-SL+T&R		14-Apr-20
DS2401A-00F-00+T&R		14-Apr-20
DS2401A-102-0D2+		14-Apr-20
DS2401A-102-0D2+T		14-Apr-20
DS2431+		14-Apr-20
DS2431+T&R		14-Apr-20
DS2431-004-56+T		14-Apr-20
DS24B33+		14-Apr-20
DS24B33+T&R		14-Apr-20
DS2502+		14-Apr-20
DS2502+T&R		14-Apr-20
DS28E25+		14-Apr-20
DS28E25+T		14-Apr-20
DS28E35-W45+1T		14-Apr-20
DS28EC20+		14-Apr-20
DS28EC20+T		14-Apr-20

DS28EC20-224-BB+		14-Apr-20
DS28EC20-224-BB+T		14-Apr-20

**PURPOSE**

Qualify assembler Greatek/Taiwan to build 3 Pin Pb-Free TO92 plastic package with 1.0 mil diameter Au bond wire, Sumitomo G600F Green mold compound, Sumitomo CRM1076DJ Ag filled die attach epoxy, 100% matte Sn plating

**QUALIFICATION: Lot Information/Test Results**

TEST	REL#: 48962	REL#: 48963	REL#: 48964
	DEVICE: DS2501 D4	DEVICE: DS2501 D4	DEVICE: DS2501 D4
	LOT#: QE168668AB-QUAL	LOT#: QE168668AC-QUAL	LOT#: QE168668AD-QUAL
	DIE: DS2502 22Q9	DIE: DS2502 22Q9	DIE: DS2502 22Q9
	D/C: 1127	D/C: 1127	D/C: 1127
Operating Life	1000 hours – 0/77	0/77	0/77
Temperature Cycle	1000 cycles – 0/77	0/77	0/76
High Temperature Storage	1000 hours – 0/77	0/77	0/77
Biased HAST	96 hours – 0/77	0/77	0/77
Moisture Sensitivity Reflow	0/100	0/100	0/100
Solderability, Pb-Free Solderability, Sn63Pb37	0/6 0/6	0/6 0/6	0/6 0/6
Physical Dimensions	0/10	0/10	0/10
Solder Shock	0/15	0/15	0/15
Solder Heat	0/15	0/15	0/15
Lead Integrity	0/6	0/6	0/6

**CONCLUSION**

All qualification lots have passed Maxim reliability qualification requirements. In addition, the package has completed Moisture Sensitivity Level 1 testing per JEDEC J-STD-020D.1, and solder reflow test at 260°C peak temperature (Tp). Therefore, assembler Greatek/Taiwan is fully qualified to build 3 Pin Pb-Free TO92 plastic package.

TO92 package codes that can be covered by this qualification results in accordance with Maxim Qual By Extension (QBE) policy are Q2+1, Q3+1, Q3+4