

PCN # 1703N

DATE: June 29, 2018

EXPECTED PCN SHIP DATE: June 29, 2018



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:

DESIGN     WAFER FAB     ASSEMBLY     TEST     ELEC/MECH SPECS

AFFECTED PRODUCT:

Ordering P/N: (See PN listing XLS in PCN ZIP file)

CHANGE FROM: - Maxim products in SOT23 package manufactured at current subcontractor	CHANGE TO: - Additional Assembler Greatek in Taiwan/R.O.C.
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JUSTIFICATION: -  
Maxim has selected Greatek to expand assembly capacity. Greatek is an established assembly subcontractor and is certified under QS 9000, ISO/TS 16949, ISO 14001.  
This new partnership will enhance Maxim's Supply-Chain to meet capacity demands, flexibility and on-time delivery. Qualification results are reflected in Maxim's Reliability report attached (R29115FQ).  
There are no changes to the form, fit, function of these devices.

TRACEABILITY: Maxim Integrated maintains full traceability by device marking, packaging labels and shipment documents.

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	PCN Proposed Ship Date
DS1990R-F5#	29-Jun-18
DS28E05R+T	29-Jun-18
LM4040CIM3-5.0+T	29-Jun-18
MAX1118EKA+T	29-Jun-18
MAX1726EUK33+T	29-Jun-18
MAX3180EEUK+T	29-Jun-18
MAX3188EEUT+T	29-Jun-18
MAX4004EUT+T	29-Jun-18
MAX4173HEUT+T	29-Jun-18
MAX4200EUK+T	29-Jun-18
MAX4223EUT+T	29-Jun-18
MAX4237EUT+T	29-Jun-18
MAX4467EKA+T	29-Jun-18
MAX4515EUK+T	29-Jun-18
MAX4520EUT+T	29-Jun-18
MAX4647EUT+T	29-Jun-18
MAX4675EUT+T	29-Jun-18
MAX5400EKA+T	29-Jun-18
MAX5401EKA+T	29-Jun-18
MAX5491LC01000+T	29-Jun-18
MAX6003EUR+T	29-Jun-18
MAX6004EUR+T	29-Jun-18
MAX6005EUR+T	29-Jun-18
MAX6009BEUR+T	29-Jun-18
MAX6035BAUR25+T	29-Jun-18
MAX6103EUR+T	29-Jun-18
MAX6106EUR+T	29-Jun-18
MAX6107EUR+T	29-Jun-18
MAX6346UR46+T	29-Jun-18
MAX6348UR46+T	29-Jun-18
MAX6365PKA29+T	29-Jun-18
MAX6457UKD3C+T	29-Jun-18
MAX6520EUR+T	29-Jun-18
MAX6718UKSHD3+T	29-Jun-18
MAX824TEUK+T	29-Jun-18
MAX825MEUK+T	29-Jun-18
MAX835EUK+T	29-Jun-18
MAX870EUK+T	29-Jun-18
MAX9011EUT+T	29-Jun-18
MAX9019EKA+T	29-Jun-18
MAX9021AUK+T	29-Jun-18
MAX9030AUT+T	29-Jun-18
MAX9050AEUK+T	29-Jun-18
MAX9060EUK+T	29-Jun-18
MAX917EUK+T	29-Jun-18
MAX9203EKA+T	29-Jun-18

MAX9634FEUK+T  
MAX9634HEUK+T  
MXD1818UR22+T

29-Jun-18  
29-Jun-18  
29-Jun-18

## 1) PURPOSE

To qualify assembler Greatek to build SOT packages with 0.8/1.0 mil Au-wire

## 2) QUALIFICATION REQUIREMENTS AND RESULTS

Rel#	R29115A	R29115B		
Lot#	J8K2EA124KD	J8K2EA124KE		
Device:	MAX6414UK31/V+	MAX6414UK31/V+		
Die Type:	MS60Z-2Z	MS60Z-2Z		
Die Size (mils)	36X36 mil	36X36 mil		
Package Type (code):	6 LSOT23(U5+2)	6 LSOT23(U5+2)		
Date Code:	1738	1738		
Topmark:	CY	CY		
Stress Test	Duration	Sampling Plan	Result	Result
Convection Reflow <sup>*1,2,3</sup> 260°C Peak	MSL 1, 3X	0/400	0/400	0/400
HAST 130°C / 85% R.H. <sup>*1,2,3</sup>	96 hrs.	0/77	0/77	0/77
Unbiased HAST 130°C / 85% R.H. <sup>*1,3</sup>	96 hrs.	0/77	0/77	0/77
Temperature Cycle <sup>*1,2,3</sup> -65°C to 150°C (Condition C)	1000 cyc	0/77	0/77	0/77
High Temperature Storage 150°C <sup>*1,2,3</sup>	1000 hrs.	0/77	0/77	0/77
HTOL <sup>*2,3,4</sup>	1000 hrs	0/77	0/77	0/77
C-SAM*1	Post-Precon	0/22	0/22	0/22
Wire Bond Pull Minimum 5 grams-force	Post TCT 500x	0/20	0/20	0/20
Solderability (Lead-Free,245C)	T (0)	0/15	0/15	0/15
Physical Dimension (PD)	T (0)	0/20	0/20	0/20
Bondcrater	Post-Precon	0/20	0/20	0/20
Solder Shock*3	T0	0/15	0/15	0/15

### Notes:

- \*1. Convection reflow is used as preconditioning for SMD packages.
- \*2. Electrical tests pre- and post-stress were performed at +125°C.
- \*3. Electrical tests pre- and post-stress were performed at +25°C.
- \*4. Electrical tests pre- and post-stress were performed at -40°C.

Rel#	R29115C		R29115D	
Lot#	JLZ4DA525DC		JLZ4DA525DF	
Device:	MAX6750KA30/V+		MAX6750KA30/V+	
Die Type:	MS62Y-4Z		MS62Y-4Z	
Die Size (mils)	24X80 mil		24X80 mil	
Package Type (code):	8 LSOT23 (K8+5)		8 LSOT23 (K8+5)	
Date Code:	1743		1743	
Topmark:	Z DC		Z DC	
Stress Test	Duration	Sampling Plan	Result	Result
Convection Reflow <sup>*1,2,3</sup> 260°C Peak	MSL 1, 3X	0/400	0/400	0/400
HAST 130°C / 85% R.H. <sup>*1,2,3</sup>	96 hrs.	0/77	0/77	0/77
Unbiased HAST 130°C / 85% R.H. <sup>*1,3</sup>	96 hrs.	0/77	0/77	0/77
Temperature Cycle <sup>*1,2,3</sup> -65°C to 150°C (Condition C)	1000 cyc	0/77	0/77	0/77
High Temperature Storage 150°C <sup>*1,2,3</sup>	1000 hrs.	0/77	0/77	0/77
HTOL <sup>*2,3,4</sup>	1000 hrs	0/77	QBE(MS60)	QBE(MS60)
C-SAM*1	Post-Precon	0/22	0/22	0/22
Wire Bond Pull Minimum 5 grams-force	Post TCT 500x	0/20	0/20	0/20
Solderability (Lead-Free,245C)	T (0)	0/15	0/15	0/15
Physical Dimension (PD)	T (0)	0/20	0/20	0/20
Bondcrater	Post-Precon	0/20	0/20	0/20
Solder Shock <sup>*3</sup>	T0	0/15	0/15	0/15

Notes:

- \*1. Convection reflow is used as preconditioning for SMD packages.
- \*2. Electrical tests pre- and post-stress were performed at +125°C.
- \*3. Electrical tests pre- and post-stress were performed at +25°C.
- \*4. Electrical tests pre- and post-stress were performed at -40°C.

<b>Rel#</b>	R29115E		
<b>Lot#</b>	J310G3075BF		
<b>Device:</b>	MAX5026EUT+		
<b>Die Type:</b>	NP15X		
<b>Die Size (mils)</b>	60X41 mil		
<b>Package Type (code):</b>	6L SOT (U6SN+1)		
<b>Date Code:</b>	1744		
<b>Topmark:</b>	DT		
<b>Stress Test</b>	<b>Duration</b>	<b>Sampling Plan</b>	<b>Result</b>
<b>Convection Reflow <sup>*2,3</sup> 260°C Peak</b>	MSL1, 3X	0/400	0/400
<b>HAST 130°C / 85% R.H. <sup>*1,2,3</sup></b>	96 hrs.	0/77	0/77
<b>Unbiased HAST 130°C / 85% R.H. <sup>*1,2</sup></b>	96 hrs.	0/77	0/77
<b>Temperature Cycle <sup>*1,2,3</sup> -65°C to 150°C (Condition C)</b>	1000 cyc	0/77	0/77
<b>High Temperature Storage 150°C <sup>*1,2,3</sup></b>	1000 hrs.	0/77	0/77
<b>HTOL <sup>*2,3,4</sup></b>	1000 hrs	0/77	0/77
<b>Solderability (Lead-Free,245C)</b>	0/15	0/15	0/15
<b>C-SAM*1</b>	Post-Precon	0/22	0/22
<b>Wire Bond Pull Minimum 5 grams-force</b>	T (0)	0/20	0/20
<b>Physical Dimension (PD)</b>	T (0)	0/20	0/20
<b>Bondcrater</b>	Post-Precon	0/20	0/20
<b>Solder Shock<sup>*3</sup></b>	T(0)	0/15	0/20

Notes:

- \*1. Convection reflow is used as preconditioning for SMD packages.
- \*2. Electrical tests pre- and post-stress were performed at +85°C.
- \*3. Electrical tests pre- and post-stress were performed at +25°C.
- \*4. Electrical tests pre- and post-stress were performed at -40°C.

<b>Rel#</b>	R29115F		
<b>Lot#</b>	JDJ2D3135CD		
<b>Device:</b>	MAX3295AUT+T		
<b>Die Type:</b>	RT66Z-2Z		
<b>Die Size (mils)</b>	70X45 mil		
<b>Package Type (code):</b>	6L SOT (U6CN+2)		
<b>Date Code:</b>	1744		
<b>Topmark:</b>	DS		
<b>Stress Test</b>	<b>Duration</b>	<b>Sampling Plan</b>	<b>Result</b>
<b>Convection Reflow <sup>*2,3</sup> 260°C Peak</b>	MSL 1, 3X	0/400	0/400
<b>HAST 130°C / 85% R.H. <sup>*1,2,3</sup></b>	96 hrs.	0/77	0/77
<b>Unbiased HAST 130°C / 85% R.H. <sup>*1,2</sup></b>	96 hrs.	0/77	0/77
<b>Temperature Cycle <sup>*1,2,3</sup> -65°C to 150°C (Condition C)</b>	1000 cyc	0/77	0/77
<b>High Temperature Storage 150°C <sup>*1,2,3</sup></b>	1000 hrs.	0/77	0/77
<b>HTOL <sup>*2,3,4</sup></b>	1000 hrs	0/77	QBE (NP15)
<b>Solderability (Lead-Free,245C)</b>	T(0)	0/15	0/15
<b>C-SAM*1</b>	Post-Precon	0/25	0/25
<b>Wire Bond Pull Minimum 5 grams-force</b>	Post TCT 500x	0/20	0/20
<b>Physical Dimension (PD)</b>	T (0)	0/20	0/20
<b>Bondcrater</b>	Post-Precon	0/20	0/20
<b>Solder Shock<sup>*3</sup></b>	T(0)	0/15	0/20

Notes:

- \*1. Convection reflow is used as preconditioning for SMD packages.
- \*2. Electrical tests pre- and post-stress were performed at +125°C.
- \*3. Electrical tests pre- and post-stress were performed at +25°C.
- \*4. Electrical tests pre- and post-stress were performed at -40°C.

### 3) CONCLUSION

Qualification lots assembled at Greatek have passed reliability qualification (Full Qualification Requirements / Acceptance Criteria). Therefore, assembler Greatek is qualified to build SOT packages with Au-wire. These packages, as tested MSL1, are not moisture sensitive, therefore, requires no bake-and-bag precautions for shipment and/or storage.

### 4) Package Coverage

The following packages can be covered by this qualification result.

K8+1	K8CN+2	U3+2	U5+2	U6+4	U6+9
K8+2	K8SN+1	U3+5	U6+1	U6+5	U6CN+2
K8+5	U3+1	U5+1	U6+2	U6+8	U6SN+1