

PCN # 1703RN

DATE: January 11, 2021

EXPECTED PCN SHIP DATE: January 11, 2021



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)

CHANGE FROM: - Maxim commercial products in SOT package manufactured at current subcontractor	CHANGE TO: - Additional Assembler Greatek in Taiwan/R.O.C.
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JUSTIFICATION: - Adding Greatek to expand 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 (with R29115FQ reference). 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.

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	Customer part number	PCN Proposed Ship Date
MAX11105AUT+T		11-Jan-21
MAX16155ABAD+T		11-Jan-21
MAX22191AUT+T		11-Jan-21
MAX3180EUK+T		11-Jan-21
MAX3190EEUT+T		11-Jan-21
MAX4037EUT+T		11-Jan-21
MAX4040EUK+T		11-Jan-21
MAX4173TEUT+T		11-Jan-21
MAX4352EUK+T		11-Jan-21
MAX4400AUK+T		11-Jan-21
MAX4450EUK+T		11-Jan-21
MAX4465EUK+T		11-Jan-21
MAX4505EUK+T		11-Jan-21
MAX4515CUK+T		11-Jan-21
MAX4627EUK+T		11-Jan-21
MAX5362MEUK+T		11-Jan-21
MAX5381PEUK+T		11-Jan-21
MAX5467EUT+T		11-Jan-21
MAX5468EUT+T		11-Jan-21
MAX6306UK30D1+T		11-Jan-21
MAX6323DUT29+T		11-Jan-21
MAX6340UK29+T		11-Jan-21
MAX6363PUT29+T		11-Jan-21
MAX6413UK22+T		11-Jan-21
MAX6415UK+T		11-Jan-21
MAX6418UK44+T		11-Jan-21
MAX6418UK46+T		11-Jan-21
MAX6455UT29S+T		11-Jan-21
MAX6457UKDOC+T		11-Jan-21
MAX6501UKP120+T		11-Jan-21
MAX6514UKP105+T		11-Jan-21
MAX6730UTSD3+T		11-Jan-21
MAX6822LUK+T		11-Jan-21
MAX6824SUK+T		11-Jan-21
MAX6829SHUT+T		11-Jan-21
MAX6854UK19D1+		11-Jan-21
MAX6854UK23D3+T		11-Jan-21
MAX6864UK16D3S+T		11-Jan-21
MAX6864UK29D3L+T		11-Jan-21
MAX6864UK29D3S+T		11-Jan-21
MAX824SEUK+T		11-Jan-21
MAX825REUK+T		11-Jan-21
MAX871EUK+T		11-Jan-21
MAX9040AEUK+T		11-Jan-21
MAX9064EUK+T		11-Jan-21
MAX9100EUK+T		11-Jan-21

MAX918EUK+T
MAX920EUK+T
MAX9938WEUK+T

11-Jan-21
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11-Jan-21

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

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