PCN # 1702N

DATE: May 22, 2018

EXPECTED PCN SHIP DATE: May 22, 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: -	CHANGE TO: -
Maxim products in SOIC(N) package manufactured at current subcontractor	Additional Assembler Greatek in Taiwan/R.O.C.

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 and Sony Green Partner.

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 (R29114CQ).

There are no changes to the form, fit, function or quality 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

1) PURPOSE

To qualify assembler Greatek to build SOIC(N) packages with 0.8/1.0/1.3/2.0 mil Au-wire

2) QUALIFICATION REQUIREMENTS AND RESULTS

Rel#			R29114A	R29114C	R29114D
Lot#			JQ3AHA023DC	JQ3AHA023DE	JQ3AHA023DG
Device:			MAX1709ESE+	MAX1709ESE+	MAX1709ESE+
Die Type:			PX35Y	PX35Y	PX35Y
Die Size (mils)			86X193 mil	86X193 mil	86X193 mil
Package Type (code):			S16+8	S16+8	S16+8
Date Code:			1738	1738	1738
Topmark:			ZQ3A JCF	ZQ3A JCF	ZQ3A JCF
Stress Test	**Duration**	**Sampling Plan**	**Result**	**Result**	**Result**
Convection Reflow *2,3 **260°C Peak**	MSL 1, 3X	0/400	0/399	0/400	0/400
HAST 130°C / 85% R.H. *1,2,3	96 hrs.	0/77	0/77	0/77	0/77
Unbiased HAST 130°C / 85% R.H. *1,2	96 hrs.	0/77	0/77	0/77	0/77
Temperature Cycle *1,2,3 **-65°C to 150°C (Condition C)**	500 cyc	0/77	0/77	0/77	0/77
High Temperature Storage 150°C *1,2,3	500 hrs.	0/77	0/77	0/77	0/77
HTOL*2,3,4	500 hrs	0/77		0/77	
C-SAM*1	T0, Post-Precon	0/25	0/25	0/25	0/25
Wire Bond Pull Minimum 5 grams-force	T (0), Post-TC	0/200 wires	0/200wires	0/200wires	0/200wires
Solderability (Lead-Free,245C)	T (0)	0/15	0/15	0/15	0/15
Physical Dimension (PD)	T (0)	0/20	0/20	0/20	0/20
Bondcrater	Post-Precon	0/20	0/20	0/20	0/20
Solder Shock		0/15	0/15	0/15	0/15

Note:

*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#			R29114E	R29114F	R29114G
Lot#			J6Y5GA819FA	J6Y5GA819FB	N380B3108CA
Device:			MAX5033BASA+	MAX5033BASA+	MAX494CSD+
Die Type:			NP25U-5Z	NP25U-5Z	OX56Y
Die Size (mils)			85 X 145	85 X 145	69 X 100
Package Type (code):			S8+5	S8+5	S14+1
Date Code:			1744	1744	1744
Topmark:			Z DM	Z DM	Z380 NCX
Stress Test	**Duration**	**Sampling Plan**	**Result**	**Result**	**Result**
Convection Reflow *2,3,5 **260°C Peak**	MSL 1, 3X	0/400	0/400	0/400	0/400
HAST 130°C / 85% R.H. *1,2,3,5	96 hrs.	0/77	0/77	0/77	0/77
Unbiased HAST 130°C / 85% R.H. *1,2	96 hrs.	0/77	0/77	0/77	0/77
Temperature Cycle *1,2,3,5 **-65°C to 150°C (Condition C)**	500 cyc	0/77	0/77	0/77	0/77
High Temperature Storage 150°C *1,2,3	500 hrs.	0/77	0/77	0/77	0/77
HTOL[*2,3,4]	500 hrs	0/77	0/77		
C-SAM*1	T0, Post-Precon	0/25	0/25	0/25	0/25
Wire Bond Pull Minimum 5 grams-force	T (0), Post-TC	0/200 wires	0/200wires	0/200wires	0/200wires
Solderability (Lead-Free,245C)	T (0)	0/15	0/15	0/15	0/15
Physical Dimension (PD)	T (0)	0/20	0/20	0/20	0/20
Bondcrater	Post-Precon	0/20	0/20	0/20	0/20
Solder Shock		0/15	0/15	0/15	0/15

Note:

*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.
*5. Electrical tests pre- and post-stress were performed at +70°C.

Rel#			R29114K	R29114L
Lot#			JQ9CHA128JA	JQ9CHA128JB
Device:			MAX6198BESA+	MAX6198BESA+
Die Type:			RF23Z-2Z	RF23Z-2Z
Die Size (mils)			44X31	44X31
Package Type (code):			S8+2	S8+2
Date Code:			1742	1742
Topmark:			MAX6198BESA+ / 1742	MAX6198BESA+ / 1742
Stress Test	**Duration**	**Sampling Plan**	**Result**	**Result**
Convection Reflow *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. *1,2	96 hrs.	0/77	0/77	0/77
Temperature Cycle *1,2,3 **-65°C to 150°C (Condition C)**	500 cyc	0/77	0/77	0/77
High Temperature Storage 150°C *1,2,3	500 hrs.	0/77	0/77	0/77
HTOL*2,3,4	500 hrs	0/77	0/77	
Solderability (Lead-Free,245C)	-	0/15	0/15	0/15
C-SAM*1	-	0/25	0/25	0/25
Wire Bond Pull Minimum 5 grams-force	T (0), Post-TC	0/200 wires	0/200 wires	0/200 wires
Physical Dimension (PD)	T (0)	0/20	0/20	0/20
Bondcrater	Post-Precon	0/20	0/20	0/20
Solder Shock		0/15	0/20	0/20

Note:

*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.

3) CONCLUSION

Qualification lots assembled in Greatek have passed reliability qualification (Conditional Qualification Requirements / Acceptance Criteria). Therefore, assembler Greatek is conditionally qualified to build SOIC(N) packages with 0.8/1.0/1.3/2.0 mil 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.

S14+1	S14+6	S16+5	S8+17	S8+20	S8+4
S14+4	S16+1	S16+6	S8+18	S8+21	S8+5
S14+5	S16+3	S16+8	S8+2	S8+22	

Affected pr	Customer	PCN	Proposed Ship Date
DG418DY+			22-May-18
DS1135Z-10+			22-May-18
DS1302ZN+			22-May-18
DS1340Z-18+			22-May-18
DS1706RESA+T&R			22-May-18
DS1708ESA+			22-May-18
DS1708SESA+T&R			22-May-18
DS1708TESA+T&R			22-May-18
DS1809Z-010+			22-May-18
DS2502S+			22-May-18
DS2715Z+			22-May-18
MAX1232ESA+T			22-May-18
MAX13487EESA+			22-May-18
MAX1482CSD+T			22-May-18
MAX14841EASA+T			22-May-18
MAX1651CSA+			22-May-18
MAX250ESD+			22-May-18
MAX3050ASA+			22-May-18
MAX3057ASA+T			22-May-18
MAX3059ASA+			22-May-18
MAX3059ASA+T			22-May-18
MAX3070EASD+			22-May-18
MAX3074EESA+			22-May-18
MAX3074EESA+T			22-May-18
MAX3076EASD+			22-May-18
MAX3077EASA+			22-May-18
MAX3079EASD+			22-May-18
MAX3081EESA+			22-May-18
MAX3082CSA+T			22-May-18
MAX3084CSA+			22-May-18
MAX3085CSA+T			22-May-18
MAX3085ECSA+T			22-May-18
MAX3085ESA+T			22-May-18
MAX31855JASA+			22-May-18
MAX31855JASA+T			22-May-18
MAX318ESA+T			22-May-18
MAX325CSA+T			22-May-18
MAX339CSE+			22-May-18
MAX339ESE+			22-May-18
MAX3443EASA+			22-May-18
MAX3467CSA+			22-May-18
MAX3467ESA+T			22-May-18
MAX366ESA+			22-May-18
MAX366ESA+T			22-May-18
MAX398ESE+			22-May-18
MAX398ESE+T			22-May-18

MAX399ESE+	22-May-18
MAX4051ACSE+	22-May-18
MAX4052AESE+	22-May-18
MAX406AESA+	22-May-18
MAX4080FASA+	22-May-18
MAX4080FASA+T	22-May-18
MAX4081TASA+	22-May-18
MAX412CSA+	22-May-18
MAX4238ASA+T	22-May-18
MAX4242ESA+	22-May-18
MAX4373FESA+	22-May-18
MAX4373TESA+	22-May-18
MAX4391ESA+	22-May-18
MAX4475ASA+	22-May-18
MAX4475ASA+T	22-May-18
MAX4477ASA+T	22-May-18
MAX4526CSA+	22-May-18
MAX4541CSA+T	22-May-18
MAX4544ESA+T	22-May-18
MAX4553ESE+	22-May-18
MAX481ECSA+	22-May-18
MAX487ESA+T	22-May-18
MAX490CSA+	22-May-18
MAX490ESA+	22-May-18
MAX490ESA+T	22-May-18
MAX492CSA+	22-May-18
MAX5033AASA+T	22-May-18
MAX5033AUSA+T	22-May-18
MAX504CSD+T	22-May-18
MAX512CSD+T	22-May-18
MAX517BCSA+	22-May-18
MAX517BCSA+T	22-May-18
MAX518BCSA+T	22-May-18
MAX522CSA+	22-May-18
MAX522CSA+T	22-May-18
MAX531AESD+	22-May-18
MAX539AESA+	22-May-18
MAX539BESA+T	22-May-18
MAX5541ESA+	22-May-18
MAX608ESA+T	22-May-18
MAX6126BASA25+	22-May-18
MAX6143AASA10+	22-May-18
MAX6175BASA+	22-May-18
MAX6176BASA+	22-May-18
MAX619CSA+	22-May-18
MAX619ESA+T	22-May-18
MAX6225ACSA+	22-May-18

MAX6225AESA+	22-May-18
MAX6241BCSA+T	22-May-18
MAX6250ACSA+	22-May-18
MAX6325CSA+	22-May-18
MAX6325ESA+	22-May-18
MAX633AESA+	22-May-18
MAX6341ESA+	22-May-18
MAX634CSA+	22-May-18
MAX663ESA+	22-May-18
MAX664ESA+	22-May-18
MAX666ESA+T	22-May-18
MAX680CSA+T	22-May-18
MAX701ESA+T	22-May-18
MAX7400CSA+T	22-May-18
MAX7404ESA+T	22-May-18
MAX7407CSA+	22-May-18
MAX7480ESA+	22-May-18
MAX763ACSA+	22-May-18
MAX764CSA+	22-May-18
MAX795SCSA+	22-May-18
MAX813LCSA+	22-May-18
MAX8212CSA+	22-May-18
MAX861ESA+T	22-May-18
MAX902ESD+	22-May-18
MAX907CSA+T	22-May-18
MAX9144ESD+T	22-May-18
MAX922ESA+	22-May-18
MAX944CSD+	22-May-18
MAX964ESE+	22-May-18
MAX987ESA+	22-May-18
MAX989ESA+T	22-May-18
MAX992ESA+	22-May-18