

## Product Change Notice (PCN)

**Subject:** Qualification of Alternate Assembly Location of Intersil Ceramic Dual-In-Line Products

**Publication Date:** 12/22/2015

**Effective Date:** 3/22/2016

**Revision Description:**

Initial Release

**Description of Change:**

This notice is to inform you that Intersil has qualified Microchip Technology Thailand (MMT) as an alternate facility for performing assembly of the listed Ceramic Dual-In-Line (Frit Seal Cerdip) products.

**Reason for Change:**

This action will provide the capability and capacities for Intersil to meet customer's delivery requirements. The MMT facility is ISO 9001:2008, TS 16949:2009, ISO 14001:2004, and currently listed as a QML Class Q/V certified assembly location.

**Impact on fit, form, function, quality & reliability:**

There will be no change to the POD (package outline drawing), bond wire material, seal glass, package body, package lid, lead frame, or final plating. The assembly qualification plan was designed using MIL-PRF-38535, JEDEC, and other applicable industry standards to confirm there is no impact to form, fit, function, or interchangeability of the product. A summary of the qualification results is included. The remainder of the manufacturing operations (wafer fabrication, package level electrical testing, shipment, etc.) will continue to be processed to previously established conditions and systems.

**Product Identification:**

Product affected by this change is identifiable via Intersil's internal traceability system. In addition, product assembled at MMT may also be identified by the assembly site code (country of assembly) "R" when marked on the devices.

**Qualification status:** Complete, see attached

**Sample availability:** 12/22/2015 for engineering samples; Specific product samples available with 3 month ARO

**Device material declaration:** Available upon request

*Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.*

For additional information regarding this notice, please contact your regional change coordinator (below)			
Americas: <a href="mailto:PCN-US@INTERSIL.COM">PCN-US@INTERSIL.COM</a>	Europe: <a href="mailto:PCN-EU@INTERSIL.COM">PCN-EU@INTERSIL.COM</a>	Japan: <a href="mailto:PCN-JP@INTERSIL.COM">PCN-JP@INTERSIL.COM</a>	Asia Pac: <a href="mailto:PCN-APAC@INTERSIL.COM">PCN-APAC@INTERSIL.COM</a>

Appendix A - Affected Products List (see attached)

Appendix B - Qualification Results (see attached)

## Appendix A - Affected Products List

29104BJA	5962-9052502MQA	8406801VA	HI1-5046A/883
5962-8501601YA	5962-9054302MQA	8406901RA	HM1-6514/883
5962-8501602YA	5962-9073101MEA	8501501XA	HM1-6514B/883
5962-8513101XA	5962-9088801MRA	DG411AK/883	HM1-65162/883
5962-8513101XAS2035	5962-9204201MEA	HA1-4902/883	HM1-65162C/883
5962-8513102XA	5962-9204201MEAS2035	HA1-5104/883	HM1-6551B/883
5962-8513102XAS2035	7705202EA	HA7-5101/883	HM1-65642/883
5962-8513103EA	7705202EAS2035	HD1-6402B/883	HM1-65642B/883
5962-8513107XA	7705202EAS2461	HD1-6402R/883	ID82C54
5962-8671601EA	7705302EA	HD1-6409/883	ID82C55A
5962-8686001EA	7802901JA	HI1-0201/883	JM38510/19001BXA
5962-8688001QA	8001601CA	HI1-0201HS/883	JM38510/19002BXA
5962-8757701RA	8100617EA/MLB	HI1-0303/883	JM38510/19004BXA
5962-8757702RA	8403602JA	HI1-0303/883R5507	JM38510/19005BEA
5962-8778701CA	8403603JA	HI1-0506A-2	JM38510/19006BEA
5962-8850201CA	8403606JA	HI1-0508/883	JM38510/19007BEA
5962-8954801PA	8405202QA	HI1-0546/883	JM38510/19008BEA
5962-8963501PA	8406501JA	HI1-0547/883	MD80C86-2/883
5962-8963601PA	8406602QA	HI1-0548/883	MD80C88-2/883
5962-9052501MQA	8406701RA	HI1-0549/883	

Appendix B - Qualification Results – Passed All Subgroups

Reliability Test	5962-8757702RA	5962-8688001QA	5962-8954801PA	8406501JA	M38510/19008BEA
	20 LEAD CERDIP - Eutectic	40 LEAD CERDIP - Eutectic	8 LEAD CERDIP - Silver Glass	24 LEAD CERDIP - Silver Glass	16 LEAD CERDIP - Eutectic
Subgroup B1	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot
	Resistance to Solvents. MIL-PRF-38535 Group B Test Method 2015.	Resistance to Solvents. MIL-PRF-38535 Group B Test Method 2015	Resistance to Solvents. MIL-PRF-38535 Group B Test Method 2015.	Resistance to Solvents. MIL-PRF-38535 Group B Test Method 2015	Resistance to Solvents. MIL-PRF-38535 Group B Test Method 2015.
Subgroup B2	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot
	Die Shear Test or Stud Pull. MIL-PRF-38535 Group B Test Method 2019 or 2027	Die Shear Test or Stud Pull. MIL-PRF-38535 Group B Test Method 2019 or 2027	Die Shear Test or Stud Pull. MIL-PRF-38535 Group B Test Method 2019 or 2027	Die Shear Test or Stud Pull. MIL-PRF-38535 Group B Test Method 2019 or 2027	Die Shear Test or Stud Pull. MIL-PRF-38535 Group B Test Method 2019 or 2027
	ss=4 from 1 lot	ss=4 from 1 lot	ss=4 from 1 lot	ss=4 from 1 lot	ss=4 from 1 lot
	Wire Bond strength. MIL-PRF-38535 Group B Test Method 2011. 22 wires from 4 devices	Wire Bond strength. MIL-PRF-38535 Group B Test Method 2011. 22 wires from 4 devices	Wire Bond strength. MIL-PRF-38535 Group B Test Method 2011. 22 wires from 4 devices	Wire Bond strength. MIL-PRF-38535 Group B Test Method 2011. 22 wires from 4 devices	Wire Bond strength. MIL-PRF-38535 Group B Test Method 2011. 22 wires from 4 devices
Subgroup B3	ss=22 from 1 lot	ss=22 from 1 lot	ss=22 from 1 lot	ss=22 from 1 lot	ss=22 from 1 lot
	Solderability Lead Finish. MIL-PRF-38535 Group B Test Method 2003	Solderability Lead Finish. MIL-PRF-38535 Group B Test Method 2003.	Solderability Lead Finish. MIL-PRF-38535 Group B Test Method 2003.	Solderability Lead Finish. MIL-PRF-38535 Group B Test Method 2003	Solderability Lead Finish. MIL-PRF-38535 Group B Test Method 2003

Reliability Test	5962-8757702RA	5962-8688001QA	5962-8954801PA	8406501JA	M38510/19008BEA
	20 LEAD CERDIP - Eutectic	40 LEAD CERDIP - Eutectic	8 LEAD CERDIP - Silver Glass	24 LEAD CERDIP - Silver Glass	16 LEAD CERDIP - Eutectic
Subgroup D1	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot
	a) Physical Dimensions	a) Physical Dimensions	a) Physical Dimensions	a) Physical Dimensions	a) Physical Dimensions
Subgroup D2	ss=45 from 1 lot	ss=45 from 1 lot	ss=45 from 1 lot	ss=45 from 1 lot	ss=45 from 1 lot
	a) Lead Integrity	a) Lead Integrity	a) Lead Integrity	a) Lead Integrity	a) Lead Integrity
	b) Seal Test (Fine & Gross Leak)	b) Seal Test (Fine & Gross Leak)	b) Seal Test (Fine & Gross Leak)	b) Seal Test (Fine & Gross Leak)	b) Seal Test (Fine & Gross Leak)
Subgroup D3	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot
	a) Thermal Shock	a) Thermal Shock	a) Thermal Shock	a) Thermal Shock	a) Thermal Shock
	b) Temp Cycle (100)	b) Temp Cycle (100)	b) Temp Cycle (100)	b) Temp Cycle (100)	b) Temp Cycle (100)
	c) Moisture Resist	c) Moisture Resist	c) Moisture Resist	c) Moisture Resist	c) Moisture Resist
	d) Visual Inspection	d) Visual Inspection	d) Visual Inspection	d) Visual Inspection	d) Visual Inspection
	e) Seal Test (Fine & Gross Leak)	e) Seal Test (Fine & Gross Leak)	e) Seal Test (Fine & Gross Leak)	e) Seal Test (Fine & Gross Leak)	e) Seal Test (Fine & Gross Leak)
	f) Electrical	f) Electrical	f) Electrical	f) Electrical	f) Electrical
Subgroup D4	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot
	a) Mechanical Shock	a) Mechanical Shock	a) Mechanical Shock	a) Mechanical Shock	a) Mechanical Shock
	b) Vibration	b) Vibration	b) Vibration	b) Vibration	b) Vibration
	c) Constant Acc.	c) Constant Acc.	c) Constant Acc.	c) Constant Acc.	c) Constant Acc.
	d) Seal Test (Fine & Gross Leak)	d) Seal Test (Fine & Gross Leak)	d) Seal Test (Fine & Gross Leak)	d) Seal Test (Fine & Gross Leak)	d) Seal Test (Fine & Gross Leak)
	e) Visual Inspection	e) Visual Inspection	e) Visual Inspection	e) Visual Inspection	e) Visual Inspection
	f) Electrical	f) Electrical	f) Electrical	f) Electrical	f) Electrical
Subgroup D5	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot
	a) Salt Atmosphere	a) Salt Atmosphere	a) Salt Atmosphere	a) Salt Atmosphere	a) Salt Atmosphere
	b) Visual Inspection	b) Visual Inspection	b) Visual Inspection	b) Visual Inspection	b) Visual Inspection
	c) Seal Test (Fine & Gross Leak)	c) Seal Test (Fine & Gross Leak)	c) Seal Test (Fine & Gross Leak)	c) Seal Test (Fine & Gross Leak)	c) Seal Test (Fine & Gross Leak)
Subgroup D6	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot	ss=3 from 1 lot
	Internal Water Vapor	Internal Water Vapor	Internal Water Vapor	Internal Water Vapor	Internal Water Vapor
Subgroup D7	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot	ss=15 from 1 lot
	Adhesion of Lead Finish	Adhesion of Lead Finish	Adhesion of Lead Finish	Adhesion of Lead Finish	Adhesion of Lead Finish
Subgroup D8	ss=5 from 1 lot	ss=5 from 1 lot	ss=5 from 1 lot	ss=5 from 1 lot	ss=5 from 1 lot
	Lid Torque	Lid Torque	Lid Torque	Lid Torque	Lid Torque