

Cypress Semiconductor Corporation, 198 Champion Court, San Jose, CA 95134. Tel: (408) 943-2600

PRODUCT CHANGE NOTIFICATION

PCN: PCN182401

Date: June 13, 2018

Subject: Qualification of OSE-T as an Additional Assembly Site for Select Automotive Products

Change Type: Major

Description of Change:

Cypress announces the qualification of Orient Semiconductor Electronics, Taiwan (OSE-T) as an additional assembly site for select automotive products. These products are RoHS and REACH compliant. These products are assembled in the following package configurations.

The 28-Lead TSOP I (8x13.4x1.2mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE-T Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo EMEG631SH	Kyocera G6000DA
Leadfinish	Pure Sn	NiPdAu
Die Attach Material	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au	1.0 mil Au

The 32-Lead TSOP I (8x13.4x1.2mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE-T Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo EMEG631SH	Kyocera G6000DA
Leadfinish	Pure Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au	1.0 mil Au

The 44-Lead TSOP II (11x18.5x1.2mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE-T Bill of Materials	JCET Bill of Materials		
Mold Compound	Sumitomo EMEG631SH	Kyocera KEG6000DA		
Leadfinish	Pure Sn	NiPdAu PPF		
Die Attach Epoxy	Sumitomo CRM1076WA	Henkel QMI509		
Bond Wire	0.8 mil Au	0.8 / 0.9 / 1.0 mil Au		

The 48-Lead SSOP (7.50x15.87x2.60mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE-T Bill of Materials	JCET Bill of Materials		
Mold Compound	Sumitomo EMEG700SLA	Kyocera KEG6000DA		
Leadfinish	Pure Sn	NiPdAu		
Die Attach Epoxy	Sumitomo CRM1076WA	Henkel QMI509		
Bond Wire	0.8 mil Au	1.0 mil Au		

The 32-Lead SOIC (11.30x20.45x3.00mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE-T Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo EMEG631SH	Kyocera KEG6000DA
Leadfinish	Pure Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM1076WA	Henkel QMI509
Bond Wire	0.8 mil Au	1.0 mil Au

Benefit of Change:

Qualification of alternate manufacturing sites is part of the ongoing flexible manufacturing initiative announced by Cypress. The goal of the flexible manufacturing initiative is to provide the means for Cypress to continue to meet delivery commitments through dynamic, changing market conditions.

Part Numbers Affected: 118

See the attached 'Affected Parts List' file for a list of all part numbers affected by this change. Note that any new parts that are introduced after the publication of this PCN will include all changes outlined in this PCN.

Qualification Status:

These assembly sites have been qualified through a series of tests documented in the Qualification Test Plans summarized in the table below. These qualification reports can be found as attachments to this PCN or by visiting <u>www.cypress.com</u> and typing the QTP number in the keyword search window.

QTP Number	Qualification Reports
180411	OSE Taiwan as Additional Assembly Site 28-Lead TSOP
180418	OSE Taiwan as Additional Assembly Site 32-Lead TSOP
175106	OSE Taiwan as Additional Assembly Site 44-Lead TSOP
175107	OSE Taiwan as Additional Assembly Site 44-Lead TSOP
180301	OSE Taiwan as Additional Assembly Site 48-Lead SSOP
180705	OSE Taiwan as Additional Assembly Site 32-Lead SOIC

Sample Status:

Qualification samples may not be built ahead of time for all part numbers affected by this change. Please review the attached 'Affected Parts List' file for a list of affected part numbers with their associated OSE sample ordering part numbers. Samples are available now unless there is an indication that the sample ordering part numbers are subject to lead times. If you require qualification samples, please contact your local Cypress sales representative as soon as possible, preferably within 30 days of the date of this PCN, to place any sample orders.

Approximate Implementation Date:

Effective 90 days from the date of this notification or upon customer approval, whichever comes first, all shipments of Automotive non-PPAP part numbers in the attached file will be assembled at OSE-T or other approved assembly sites.

For Automotive PPAP part numbers this change will be effective upon customer approval.

Anticipated Impact:

Products assembled at the new site are completely compatible with existing products from form, fit, functional, parametric and quality performance perspectives.

Cypress also recommends that customers take this opportunity to review these changes against current application notes, system design considerations and customer environment conditions to assess impact (if any) to their application.

Method of Identification:

Cypress maintains traceability of product to wafer level, including wafer fabrication location, through the lot number marked on the package.

Response Required:

No response is required.

For additional information regarding this change, contact your local sales representative or contact the PCN Administrator at <u>pcn_adm@cypress.com</u>.

Sincerely,

Cypress PCN Administration

ltem	Marketing Part Number	ltem	Marketing Part Number	ltem	Marketing Part Number
1	CY14B104NA-ZS25XE	41	CY62157ELL-55ZSXE	80	CY8C21645-24PVXAT
2	CY14B104NA-ZS25XET	42	CY62157ELL-55ZSXET	81	CY8C22645-12PVXE
3	CY14B104NA-ZS45XE	43	CY62157EV30LL-45ZSXA	82	CY8C22645-12PVXET
4	CY14B104NA-ZS45XET	44	CY62157EV30LL-45ZSXAT	83	CY8C22645-24PVXA
5	CY62126EV30LL-45ZSXA	45	CY62157EV30LL-55ZSXE	84	CY8C22645-24PVXAT
6	CY62126EV30LL-45ZSXAT	46	CY62157EV30LL-55ZSXET	85	CY8C29666-24PVXA
7	CY62126EV30LL-55ZSXE	47	CY62256NLL-55ZXA	86	CY8C29666-24PVXAT
8	CY62126EV30LL-55ZSXET	48	CY62256NLL-55ZXAT	87	CG7428AA
9	CY621282BNLL-70SXE	49	CY7C1011G30-10ZSXA	88	CG7428AAT
10	CY621282BNLL-70SXET	50	CY7C1011G30-10ZSXAT	89	CG7920AA
11	CY62128ELL-45SXA	51	CY7C1011G30-12ZSXE	90	CG7920AAT
12	CY62128ELL-45SXAT	52	CY7C1011G30-12ZSXET	91	CG7921AA
13	CY62128ELL-55SXE	53	CY7C1020CV26-15ZSXE	92	CG7921AAT
14	CY62128ELL-55SXET	54	CY7C1020CV26-15ZSXET	93	CG8222AA
15	CY62128ELL-55ZAXE	55	CY7C1020CV33-15ZSXE	94	CG8222AAT
16	CY62128ELL-55ZAXET	56	CY7C1020CV33-15ZSXET	95	CG8225AA
17	CY62128EV30LL-45SXA	57	CY7C1021BN-15ZSXE	96	CG8225AAT
18	CY62128EV30LL-45SXAT	58	CY7C1021BN-15ZSXET	97	CG8226AA
19	CY62128EV30LL-45ZAXA	59	CY7C1021BNL-15ZSXA	98	CG8226AAT
20	CY62128EV30LL-45ZAXAT	60	CY7C1021BNL-15ZSXAT	99	CG8227AA
21	CY62136FV30LL-45ZSXA	61	CY7C1021CV26-15ZSXE	100	CG8227AAT
22	CY62136FV30LL-45ZSXAT	62	CY7C1021CV26-15ZSXET	101	CG8229AA
23	CY62136FV30LL-55ZSXE	63	CY7C1021CV33-10ZSXA	102	CG8229AAT
24	CY62136FV30LL-55ZSXET	64	CY7C1021CV33-10ZSXAT	103	CG8230AA
25	CY62137FV30LL-45ZSXA	65	CY7C1021CV33-12ZSXE	104	CG8230AAT
26	CY62137FV30LL-45ZSXAT	66	CY7C1021CV33-12ZSXET	105	CG8235AA
27	CY62137FV30LL-55ZSXE	67	CY7C1021D-10ZSXA	106	CG8235AAT
28	CY62137FV30LL-55ZSXET	68	CY7C1021D-10ZSXAT	107	CG8291AA
29	CY62138FV30LL-45ZAXA	69	CY7C1021DV33-10ZSXA	108	CG8291AAT
30	CY62138FV30LL-45ZAXAT	70	CY7C1021DV33-10ZSXAT	109	CG8292AA
31	CY62146G30-45ZSXA	71	CY7C1041BN-20ZSXA	110	CG8292AAT
32	CY62146G30-45ZSXAT	72	CY7C1041BN-20ZSXAT	111	CG8293AA
33	CY62146G-45ZSXA	73	CY7C1041G30-10ZSXA	112	CG8293AAT
34	CY62146G-45ZSXAT	74	CY7C1041G30-10ZSXAT	113	CG8297AA
35	CY621472G30-45ZSXA	75	CY7C1041G30-10ZSXE	114	CG8297AAT
36	CY621472G30-45ZSXAT	76	CY7C1041G30-10ZSXET	115	CG8306AA
37	CY62147G30-45ZSXA	77	CY8C21645-12PVXE	116	CG8306AAT
38	CY62147G30-45ZSXAT	78	CY8C21645-12PVXET	117	CG8321AA
39	CY62147G30-55ZSXE	79	CY8C21645-24PVXA	118	CG8321AAT
40	CY62147G30-55ZSXET				