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

PRODUCT CHANGE NOTIFICATION

PCN: PCN182411 **Date:** June 17, 2018

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

To:

Change Type: Major

Description of Change:
Cypress announces the qualification of Orient Semiconductor Electronics, Taiwan (OSE-T) as an additional assembly site for select commercial and industrial grade 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 package are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo EMEG631SH	Kyocera G6000DA
Leadfinish	Pure Sn	NiPdAu
Die Attach Material	Sumitomo CRM1076WA	Henkel QMI509
Bond Wire	0.8 mil Au	0.8 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 Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo EMEG631LT	Sumitomo EME-G620B
Leadfinish	Matte Sn	Matte Sn
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil CuPdAu	0.8 mil CuPd

The 56-Lead SSOP (7.50x18.41x2.60mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Sumitomo G700L	Kyocera G3000DA / EME G620B
Leadfinish	Matte Sn	NiPdAu / Pure Sn
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

The 28-Lead SOJ (7.50x17.90x3.30mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Hitachi 9240HF	Kyocera G6000DA / EME-G631SH-Q
Leadfinish	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

The 32-Lead SOJ (7.58x20.82x3.40mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Hitachi 9240HF	Kyocera G6000DA / EME-G631SH-Q
Leadfinish	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

The 32-Lead SOJ (10.16x20.95x3.50mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Hitachi 9240HF	Kyocera G6000DA / EME-G631SH-Q
Leadfinish	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

The 36-Lead SOJ (10.16x23.50x3.50mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Hitachi 9240HF	Kyocera G6000DA / EME-G631SH-Q
Leadfinish	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

The 44-Lead SOJ (10.16x28.57x3.50mm) Pb-Free packages are assembled at OSE-T using the following Bill of Materials:

Material	OSE Bill of Materials	JCET Bill of Materials
Mold Compound	Hitachi 9240HF	Kyocera G6000DA / EME-G631SH-Q
Leadfinish	Matte Sn	NiPdAu
Die Attach Epoxy	Sumitomo CRM-1076WA	Henkel QMI-509
Bond Wire	0.8 mil Au / 0.8 mil CuPdAu	0.9 mil Au / 0.8 mil CuPd

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: 85
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 www.cypress.com and typing the QTP number in the keyword search window.

QTP Number	Qualification
181101	OSE Taiwan as Additional Assembly Site for 28-Lead TSOP
180419	OSE Taiwan as Additional Assembly Site for 44-Lead TSOP
180303	OSE Taiwan as Additional Assembly Site for 56-Lead SSOP
180205	OSE Taiwan as Additional Assembly Site for 28 and 32-Lead SOJ
180206	OSE Taiwan as Additional Assembly Site for 32, 36 and 44-Lead SOJ

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 Commercial and Industrial non-PPAP part numbers in the attached file will be assembled at OSE-T or other approved assembly sites.

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 pcn_adm@cypress.com.

Sincerely,

Cypress PCN Administration

Item	Marketing Part Number	Sample Order Part Number	Package
1	CY62146ELL-45ZSXI	CY62146ELL-45ZSXIKO; Subject to lead time	TSOP 44
2	CY62146ELL-45ZSXIT	CY62146ELL-45ZSXIKO; Subject to lead time	TSOP 44
3	CY62146ESL-45ZSXI	CY62146ESL-45ZSXIKO; Subject to lead time	TSOP 44
4	CY62146ESL-45ZSXIT	CY62146ESL-45ZSXIKO; Subject to lead time	TSOP 44
5	CY62146EV30LL-45ZSXI	CY62146EV30LL-45ZSXIKO; Subject to lead time	TSOP 44
6	CY62146EV30LL-45ZSXIT	CY62146EV30LL-45ZSXIKO; Subject to lead time	TSOP 44
7	CY621472E30LL-45ZSXI	CY621472E30LL-45ZSXIKO; Subject to lead time	TSOP 44
8	CY621472E30LL-45ZSXIT	CY621472E30LL-45ZSXIKO; Subject to lead time	TSOP 44
9	CY7C1009D-10VXI	CY7C1009D-10VXIKO; Subject to lead time	SOJ 32
10	CY7C1009D-10VXIT	CY7C1009D-10VXIKO; Subject to lead time	SOJ 32
11	CY7C1010DV33-10VXI	CY7C1010DV33-10VXIKO; Subject to lead time	SOJ 36
12	CY7C1010DV33-10VXIT	CY7C1010DV33-10VXIKO; Subject to lead time	SOJ 36
13	CY7C1018DV33-10VXI	CY7C1018DV33-10VXIKO	SOJ 32
14	CY7C1018DV33-10VXIT	CY7C1018DV33-10VXIKO	SOJ 32
15	CY7C1019D-10VXI	CY7C1019D-10VXIKO; Subject to lead time	SOJ 32
16	CY7C1019D-10VXIT	CY7C1019D-10VXIKO; Subject to lead time	SOJ 32
17	CY7C1019DV33-10VXI	CY7C1019DV33-10VXIKO; Subject to lead time	SOJ 32
18	CY7C1019DV33-10VXIT	CY7C1019DV33-10VXIKO; Subject to lead time	SOJ 32
19	CY7C1020D-10VXI	CY7C1020D-10VXIKO; Subject to lead time	SOJ 44
20	CY7C1020D-10VXIT	CY7C1020D-10VXIKO; Subject to lead time	SOJ 44
21	CY7C1021D-10VXI	CY7C1021D-10VXIKO	SOJ 44
22	CY7C1021D-10VXIT	CY7C1021D-10VXIKO	SOJ 44
23	CY7C1021DV33-10VXI	CY7C1021DV33-10VXIKO; Subject to lead time	SOJ 44
24	CY7C1021DV33-10VXIT	CY7C1021DV33-10VXIKO; Subject to lead time	SOJ 44
25	CY7C1041CV33-8ZSXI	CY7C1041CV33-8ZSXIKO; Subject to lead time	TSOP 44
26	CY7C1041CV33-8ZSXIT	CY7C1041CV33-8ZSXIKO; Subject to lead time	TSOP 44
27	CY7C1041G-10VXI	CY7C1041G-10VXIKO; Subject to lead time	SOJ 44
28	CY7C1041G-10VXIT	CY7C1041G-10VXIKO; Subject to lead time	SOJ 44
29	CY7C1041G18-15VXI	CY7C1041G18-15VXIKO; Subject to lead time	SOJ 44
30	CY7C1041G18-15VXIT	CY7C1041G18-15VXIKO; Subject to lead time	SOJ 44
31	CY7C1041G30-10VXI	CY7C1041G30-10VXIKO; Subject to lead time	SOJ 44
32	CY7C1041G30-10VXIT	CY7C1041G30-10VXIKO; Subject to lead time	SOJ 44
33	CY7C1041GE-10VXI	CY7C1041GE-10VXIKO; Subject to lead time	SOJ 44
34	CY7C1041GE-10VXIT	CY7C1041GE-10VXIKO; Subject to lead time	SOJ 44
35	CY7C1041GE30-10VXI	CY7C1041GE30-10VXIKO; Subject to lead time	SOJ 44
36	CY7C1041GE30-10VXIT	CY7C1041GE30-10VXIKO; Subject to lead time	SOJ 44
37	CY7C1041GN-10VXI	CY7C1041GN-10VXIKO; Subject to lead time	SOJ 44
38	CY7C1041GN-10VXIT	CY7C1041GN-10VXIKO; Subject to lead time	SOJ 44
39	CY7C1041GN30-10VXI	CY7C1041GN30-10VXIKO; Subject to lead time	SOJ 44
40	CY7C1041GN30-10VXIT	CY7C1041GN30-10VXIKO; Subject to lead time	SOJ 44
41	CY7C1049CV33-8ZSXC	CY7C1049CV33-8ZSXCKO; Subject to lead time	TSOP 44
42	CY7C1049G-10VXI	CY7C1049G-10VXIKO; Subject to lead time	SOJ 36
43	CY7C1049G-10VXIT	CY7C1049G-10VXIKO; Subject to lead time	SOJ 36
44	CY7C1049G30-10VXI	CY7C1049G30-10VXIKO; Subject to lead time	SOJ 36
45	CY7C1049G30-10VXIT	CY7C1049G30-10VXIKO; Subject to lead time	SOJ 36
46	CY7C1049GN-10VXI	CY7C1049GN-10VXIKO; Subject to lead time	SOJ 36

47	CY7C1049GN-10VXIT	CY7C1049GN-10VXIKO; Subject to lead time	SOJ 36
48	CY7C1049GN30-10VXI	CY7C1049GN30-10VXIKO; Subject to lead time	SOJ 36
49	CY7C1049GN30-10VXIT	CY7C1049GN30-10VXIKO; Subject to lead time	SOJ 36
50	CY7C109D-10VXI	CY7C109D-10VXIKO; Subject to lead time	SOJ 32
51	CY7C109D-10VXIT	CY7C109D-10VXIKO; Subject to lead time	SOJ 32
52	CY7C1399BN-12VXI	CY7C1399BN-12VXIKO	SOJ 28
53	CY7C1399BN-12VXIT	CY7C1399BN-12VXIKO	SOJ 28
54	CY7C199CNL-15VXI	CY7C199CNL-15VXIKO; Subject to lead time	SOJ 28
55	CY7C199CNL-15VXIT	CY7C199CNL-15VXIKO; Subject to lead time	SOJ 28
56	CY7C199D-10VXI	CY7C199D-10VXIKO; Subject to lead time	SOJ 28
57	CY7C199D-10VXIT	CY7C199D-10VXIKO; Subject to lead time	SOJ 28
58	CY7C64713-56PVXC	CY7C64713-56PVXC; Subject to lead time	SSOP 56
59	CY7C64713-56PVXCT	CY7C64713-56PVXC; Subject to lead time	SSOP 56
60	CY7C68001-56PVXC	CY7C68001-56PVXCKO	SSOP 56
61	CY7C68001-56PVXCT	CY7C68001-56PVXCKO	SSOP 56
62	CY7C68013A-56PVXC	CY7C68013A-56PVXCKO; Subject to lead time	SSOP 56
63	CY7C68013A-56PVXCT	CY7C68013A-56PVXCKO; Subject to lead time	SSOP 56
64	CY7C68013A-56PVXI	CY7C68013A-56PVXI; Subject to lead time	SSOP 56
65	CY7C68014A-56PVXC	CY7C68014A-56PVXCKO; Subject to lead time	SSOP 56
66	CY7C68300C-56PVXC	CY7C68300C-56PVXCKO; Subject to lead time	SSOP 56
67	CY7C68300C-56PVXCT	CY7C68300C-56PVXCKO; Subject to lead time	SSOP 56
68	CY7S1041G30-10VXI	CY7S1041G30-10VXIKO; Subject to lead time	SOJ 44
69	CY7S1041G30-10VXIT	CY7S1041G30-10VXIKO; Subject to lead time	SOJ 44
70	CY7S1049G30-10VXI	CY7S1049G30-10VXIKO; Subject to lead time	SOJ 36
71	CY7S1049G30-10VXIT	CY7S1049G30-10VXIKO; Subject to lead time	SOJ 36
72	CY7S1049GE30-10VXI	CY7S1049GE30-10VXIKO; Subject to lead time	SOJ 36
73	CY7S1049GE30-10VXIT	CY7S1049GE30-10VXIKO; Subject to lead time	SOJ 36
74	FM22L16-55-TG	FM22L16-55-TGKO	TSOP 44
75	FM22L16-55-TGTR	FM22L16-55-TGKO	TSOP 44
76	FM28V020-T28G	FM28V020-T28GKO	TSOP 28
77	FM28V020-T28GTR	FM28V020-T28GKO	TSOP 28
78	CG8082AM	CG8082XM; Subject to lead time	SSOP 56
79	CG8082AMT	CG8082XM; Subject to lead time	SSOP 56
80	CG8243AA	CG8243XA; Subject to lead time	SOJ 32
81	CG8243AAT	CG8243XA; Subject to lead time	SOJ 32
82	CG8395AT	CG8395XT; Subject to lead time	TSOP 44
83	CG8395ATT	CG8395XT; Subject to lead time	TSOP 44
84	CG8834AM	CG8834XM; Subject to lead time	SOJ 36
85	CG8834AMT	CG8834XM; Subject to lead time	SOJ 36