



Title of Change:	Announcement of lead frame raw material change (PKG name: CP, MCPH, CPH, VEC and MFP16FS).	
Proposed first ship date:	22 July 2015	
Contact information:	Contact your local ON Semiconductor sales office or quality@onsemi.com or Shigehito.Matsumoto@onsemi.com .	
Type of notification:	ON Semiconductor considers this change approved unless specific conditions of acceptance are provided in writing. To do so, contact <quality@onsemi.com>.	
Change category(s): ☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change	☐ Manufacturing Site Change/Addition ☐ Manufacturing Process Change ☒ Material Change	☐ Product specific change ☐ Datasheet/Product Doc change ☐ Shipping/Packaging/Marking ☐ Other: _____
Sites Affected: ☐ All site(s) ☐ not applicable ☒ ON Semiconductor site(s) : ☐ External Foundry/Subcon site(s):	Site 1 ON Shenzhen, China	Site 2

Description and Purpose:

The reason is that the existing lead frame raw material will be end of life by June 2015.

We will replace the existing lead frame raw material C18020 with C19400 (C18020/C19400: ASTM code).

The table below shows comparison of mechanical and chemical properties between two materials.

Material Name		C19400 (alternative)	C18020 (Existing)
Mechanical properties			
Coefficient of Thermal Expansion	X10 ⁻⁶ /K	17.6	17.0
Thermal Conductivity	W (m·K)	262	315
Electrical Resistivity	μΩm	0.025	0.021
Electrical Conductivity	%IACS	65	75
Modulus Elasticity	KN/mm ²	121	123
Chemical properties			
Cu		Remain	Remain
Zn	%	0.05 ~ 0.20	0.10 ~ 0.30
PB	%	Max 0.03	None
Fe	%	2.10 ~ 2.60	None
Pb	%	0.01 ~ 0.15	None
Sn	%	None	Max 0.25



List of Affected Standard Parts:

12A02CH-TL-E	50C02CH-TL-EX	CPH3212-TL-EX	CPH5518-TL-E	CPH6350-TL-W
12A02MH-TL-E	50C02MH-TL-E	CPH3215-TL-E	CPH5518-TL-H	CPH6354-TL-H
15C01M-TL-E	55GN01MA-TL-E	CPH3215-TL-EX	CPH5520-TL-E	CPH6354-TL-HX
15C01M-TL-EX	5HN01M-TL-E	CPH3215-TL-H	CPH5524-TL-E	CPH6354-TL-W
15C02CH-TL-E	5HN01M-TL-H	CPH3216-TL-E	CPH5524-TL-EX	CPH6355-TL-H
15C02MH-TL-E	5HN01M-TL-HX	CPH3216-TL-EX	CPH5541-TL-E	CPH6355-TL-HX
15GN01MA-TL-E	5HP01M-TL-E	CPH3223-TL-E	CPH5617-TL-E	CPH6355-TL-W
15GN03MA-TL-E	5HP01M-TL-EX	CPH3223-TL-EX	CPH5815-TL-E	CPH6442-TL-E
1HN04CH-TL-W	5HP01M-TL-H	CPH3240-TL-E	CPH5871-TL-H	CPH6442-TL-W
1HP04CH-TL-W	5HP01M-TL-HX	CPH3240-TL-EX	CPH5871-TL-HX	CPH6443-P-TL-H
1SV246-TL-E	5LN01M-TL-E	CPH3245-TL-E	CPH5871-TL-W	CPH6443-P-TL-HX
1SV246-TL-EX	5LN01M-TL-EX	CPH3348-TL-E	CPH5901F-TL-E	CPH6443-TL-H
1SV249-TL-E	5LN01M-TL-H	CPH3348-TL-EX	CPH5901F-TL-EX	CPH6443-TL-W
1SV249-TL-EX	5LN01M-TL-HX	CPH3348-TL-W	CPH5901G-TL-E	CPH6444-TL-E
1SV263-TL-E	5LP01M-TL-E	CPH3350-TL-H	CPH5901G-TL-EX	CPH6444-TL-EX
1SV263-TL-EX	5LP01M-TL-H	CPH3350-TL-W	CPH5902G-TL-E	CPH6444-TL-W
1SV264-TL-E	5LP01M-TL-HX	CPH3351-TL-H	CPH5902G-TL-EX	CPH6445-TL-E
1SV264-TL-EX	6HN04MH-TL-W	CPH3351-TL-HX	CPH5902H-TL-E	CPH6445-TL-EX
1SV315-TL-E	6HP04CH-TL-W	CPH3351-TL-W	CPH5902H-TL-EX	CPH6445-TL-W
1SV315-TL-EX	6HP04MH-TL-W	CPH3355-TL-H	CPH5905G-TL-E	CPH6501-TL-E
2SC4211-6-TL-E	CPH3101-TL-E	CPH3355-TL-HX	CPH5905G-TL-EX	CPH6501-TL-EX
2SC4211-6-TL-EX	CPH3101-TL-EX	CPH3355-TL-W	CPH5905H-TL-E	CPH6531-TL-E
2SC4211-7-TL-E	CPH3105-TL-E	CPH3356-TL-H	CPH5905H-TL-EX	CPH6531-TL-EX
2SC4211-7-TL-EX	CPH3105-TL-EX	CPH3356-TL-W	CPH6001A-TL-E	CPH6532-TL-E
2SC4853A-4-TL-E	CPH3106-TL-E	CPH3360-TL-H	CPH6001A-TL-EX	CPH6538-TL-H
2SC5226A-4-TL-E	CPH3106-TL-EX	CPH3360-TL-W	CPH6003A-TL-E	CPH6539-TL-H
2SC5226A-4-TL-EX	CPH3107-TL-E	CPH3362-TL-W	CPH6020-TL-E	CPH6635-TL-H
2SC5226A-5-TL-E	CPH3107-TL-EX	CPH3448-TL-H	CPH6021-TL-H	CPH6636R-TL-W
2SC5245A-4-TL-E	CPH3109-TL-E	CPH3448-TL-HX	CPH6102-TL-E	CPH6904-TL-E



MCH3374-TL-W	MCH4021-TL-E	MCH6421-TL-W	SB1003M3-TL-E
MCH3375-TL-H	MCH5541-TL-E	MCH6431-P-TL-H	SB1003M3-TL-EX
MCH3375-TL-W	MCH5839-TL-H	MCH6431-TL-H	SB1003M3-TL-W
MCH3376-TL-E	MCH5839-TL-W	MCH6431-TL-HX	SB2003M-TL-E
MCH3376-TL-EX	MCH5908G-TL-E	MCH6431-TL-W	SB2003M-TL-W
MCH3376-TL-W	MCH5908H-TL-E	MCH6436-TL-E	SB3003CH-TL-E
MCH3377-S-TL-E	MCH5908H-TL-EX	MCH6436-TL-EX	SBE001-TL-E
MCH3377-TL-E	MCH6001-TL-E	MCH6436-TL-W	SBE001-TL-W
MCH3377-TL-EX	MCH6101-TL-E	MCH6437-P-TL-E	SBE002-TL-E
MCH3377-TL-H	MCH6101-TL-EX	MCH6437-P-TL-EX	SBE002-TL-W
MCH3377-TL-HX	MCH6102-TL-E	MCH6437-TL-E	SBE801-TL-H
MCH3377-TL-W	MCH6102-TL-EX	MCH6437-TL-W	SBE805-S-TL-E
MCH3382-TL-H	MCH6103-TL-E	MCH6444-TL-H	SBE805-S-TL-EX
MCH3382-TL-W	MCH6121-TL-H	MCH6444-TL-W	SBE805-S-TL-W
MCH3383-TL-H	MCH6122-TL-E	MCH6445-TL-E	SBE805-TL-E
MCH3383-TL-W	MCH6122-TL-H	MCH6445-TL-EX	SBE805-TL-EX
MCH3474-TL-H	MCH6123-TL-E	MCH6445-TL-W	SBE805-TL-W
MCH3474-TL-W	MCH6124-TL-E	MCH6448-TL-H	SBE807-S-TL-W
MCH3475-TL-E	MCH6202-TL-E	MCH6448-TL-W	SBE807-TL-E
MCH3475-TL-EX	MCH6203-TL-E	MCH6534-TL-E	SBE807-TL-W
MCH3475-TL-W	MCH6320-TL-E	MCH6534-TL-EX	SBE808-TL-E
MCH3476-TL-H	MCH6320-TL-W	MCH6536-TL-E	SBE808-TL-EX
MCH3476-TL-HX	MCH6321-TL-E	MCH6536-TL-EX	SBE808-TL-W
MCH3476-TL-W	MCH6321-TL-EX	MCH6541-TL-E	SBS822-S-TL-H
MCH3477-TL-H	MCH6321-TL-W	MCH6544-TL-E	SBS822-S-TL-HX
MCH3477-TL-HX	MCH6331-TL-H	MCH6545-TL-E	SBS822-S-TL-W
MCH3477-TL-W	MCH6331-TL-W	MCH6601-TL-E	SBS822-TL-H
MCH3478-S-TL-H	MCH6336-P-TL-E	MCH6602-TL-E	SBS822-TL-W
MCH3478-S-TL-HX	MCH6336-S-TL-E	MCH6602-TL-EX	SMA3101-TL-E

List of Affected Customer Specific Parts:

Please be informed that parts impacted by this PDN/PCN are Special/Customer specific parts, thus MPN & CPN info will be available to affected customers only by clicking the ["Custom PCN for Selected Company Button"](#) in the Document Analysis page of PCMS/PCN Alert.