ON Semiconductor

Product Bulletin

Document # : PB20849X
Issue Date: 8 December 2015

Title of Change:	Announcement of lead frame raw material change (PKG name: MFP16FS).
Effective date:	8 December 2015
Contact information:	Contact your local ON Semiconductor Sales Office or < tetsuya.fukushima@onsemi.com >
Type of notification:	ON Semiconductor will consider this change accepted.
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other _____

Change Sub-Category(s):
☐ 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) :
ON Tarlac City, Philippines
☐ External Foundry/Subcon site(s)

Description and Purpose:

The reason is that the existing lead frame raw material will be end of life by January 2016.
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	$X10^{-8}/K$	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:

LA6584M-MPB-E
LA6584M-MPB-H
LA6584M-TLM-E
LA6584M-TLM-H