ON Semiconductor



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION Generic Copy

03-May-2006

SUBJECT: ON Semiconductor Final Product/Process Change Notification #15520

TITLE: Final Notice to Dual Source MC7805 and MC7812 Voltage Regulators at ONPY1 and ONCR

EFFECTIVE DATE: 02-Jul-2006

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

AFFECTED PRODUCT DIVISION(S): Analog Power management

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Alan Garlington<rpr180@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Alan Garlington<rpr180@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 60 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This is the Final PCN to notify customers of the qualification of the MC7805 and MC7812 Voltage regulator families at the ON Semiconductor wafer fab in Piestany, Slovakia (ONPY1). The existing design database currently in use at ONCR has been transferred to ONPY1 with no change to the functional circuit design. New mask sets have been generated which will incorporate required process control and alignment patterns. Full electrical characterization and bench analysis has been performed on all devices to ensure no change to device functionality or data sheet electrical specifications. The ONPY1 fab will be used to provide additional capacity for these products. This is a dual qualification where these devices will continue to be also processed at the ON Semiconductor wafer fab (ONCR) located in Roznov, Czech Republic.

As this is the final PCN, customers will have 60 days before devices from this new location may be shipped. Samples are available upon request.

The Initial PCN (#15130) for this change was issued on 4-Dec-2005.

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RELIABILITY DATA SUMMARY:

Device = MC7805BT Wafer fab lot: RXA 611G Reliability ID: R117Q-06

Test	Description	Conditions	Read Pt	Results
HTOL AC	High Temp Operating Life Autoclave	Ta = 125C; Vi = 28v Ta = 121C; RH = 100%	504 Hr	0/80
TC	Temperature Cycle	PSIG = 15 -65C to +150C	96 Hr 500 Cyc	0/80 0/80
LU	Latch UP AEC-0100-004	Class I , 25C		Pass
LU	Latch UP AEC-Q100-004	Class II, 85C		Pass
ESD	Electro-static Discharge AEC-Q100-002	Human Body Model	2000 v	Pass
ESD	Electro-static Discharge AEC-Q100-103	Machine Model (MM)	200 v	Pass

ELECTRICAL CHARACTERISTIC SUMMARY:

Devices are electrically the same. There is no change to data sheet specifications.

CHANGED PART IDENTIFICATION:

Wafer fab source may be identified through device marking traceability codes.

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AFFECTED DEVICE LIST:

PART

MC7805BD2T MC7805BD2TG MC7805BD2TR4 MC7805BD2TR4G MC7805BDT MC7805BDTG MC7805BDTRK MC7805BDTRKG MC7805BT MC7805BTG MC7805CD2T MC7805CD2TG MC7805CD2TR4 MC7805CD2TR4G MC7805CDT MC7805CDTG MC7805CDTRK MC7805CDTRKG MC7805CT MC7805CTG MC7812BD2T MC7812BD2TG MC7812BD2TR4 MC7812BD2TR4G MC7812BDT MC7812BDTG MC7812BDTRK MC7812BDTRKG MC7812BT MC7812BTG MC7812CD2T MC7812CD2TG MC7812CD2TR4 MC7812CD2TR4G MC7812CDT MC7812CDTG MC7812CDTRK MC7812CDTRKG MC7812CT MC7812CTG