

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16386

Generic Copy

18-Feb-2010

<u>TITLE</u>: MOSFET TO220 Products to Nantong-Fujitsu Microelectronics Co.

PROPOSED FIRST SHIP DATE: 15-May-2010

AFFECTED CHANGE CATEGORY(S): MOSFET Backend Manufacturing

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Dianne von Borstel d.von.borstel@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Brian Goodburn brian.goodburn@onsemi.com>

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Donna Scheuch <d.scheuch@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

This is a notification that ON Semiconductor will be using Nantong Fujitsu Microelectronics Co. (NFME) as a TO220 manufacturing facility for their MOSFET products.

NFME's TO220 package does meet the JEDEC case outline. The Product portfolio, which will be assembled and electrically tested at NFME, will be included in the Device list with this notification.

In addition to NFME, ON Semiconductor will continue to manufacture TO220 products at their current external subcontractor, Pacific Semiconductor Inc (PSI) located in the Philippines.

Issue Date: 18-Feb-2010 Rev. 06-Jan-2010 Page 1 of 3



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16386

RELIABILITY DATA SUMMARY:

Reliability Test Results: NTP5426G

Test: High Temperature Reverse Bias (HTRB)

Conditions: Vds= 80% Vds rating, Ta=175'C, 1008-Hrs

Results: 0/240

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs= 100% Vgs rating, Ta=175'C, 1008-Hrs.

Results: 0/240

Test: High Humidity, High Temperature Reverse Bias (H3TRB) Conditions: Vds= 24Vds, Ta=85'C, Rel Humidity = 85%, 1008-Hrs

Results: 0/240

Test: High Accelerated Stress Test (HAST)

Conditions: Vds= 24Vds, P= 18.8psig, Ta=131'C, RH = 85%, 96-Hrs

Results: 0/240

Test: High Accelerated Stress Test (uHAST) Conditions: P= 15g, Ta=12'C, RH = 10096-Hrs

Results: 0/231

Test: Intermittent Operating Life (IOL-PC)

Conditions: Ta=+25'C, delta Tj=100'C, 2-min on/off, 15K-cycles

Results: 0/240

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65'C/+150'C, Air-to-Air, Dwell >=10-min, 1000-cy

Results: 0/240

ELECTRICAL CHARACTERISTIC SUMMARY:

There is no change in electrical parametric performance. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

TO220 Product manufactured for ON Semiconductor at Nantong Fujitsu Microelectronics Co. (NFME) will be marked with 'N'

TO220 Product manufactured for ON Semiconductor at Pacific Semiconductor Inc. (PSI) will be marked with 'Q'

Issue Date: 18-Feb-2010 Rev. 06-Jan-2010 Page 2 of 3



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16386

List of affected General Parts:

MTP10N10EL

MTP10N10ELG

MTP12P10

MTP12P10G

MTP20N15E

MTP20N15EG

MTP23P06V

MTP23P06VG

MTP2P50E

MTP2P50EG

MTP50P03HDL

MTP50P03HDLG

MTP75N05HD

NTP125N02R

NTP125N02RG

NTP13N10

NTP13N10G

NTP18N06

NTP18N06G

NTP18N06L

NTP18N06LG

NTP27N06G

NTP2955

NTP2955G

NTP30N06L

NTP30N06LG

NTP30N20

NTP30N20G

NTP35N15

NTP35N15G

NTP4302

NTP4302G

NTP45N06

NTP45N06G

NTP45N06L

NTP45N06LG

NTP52N10

NTP52N10G

NTP5411NG

NTP5426NG

NTP60N06

NTP60N06G

NTP60N06L

NTP60N06LG

NTP65N02R

NTP65N02RG

NTP75N03-006

NTP75N03L09 NTP75N03L09G

NTP75N03RG

NTP75N06

NTP75N06G

NTP85N03G

NTP90N02G

Issue Date: 18-Feb-2010 Rev. 06-Jan-2010 Page 3 of 3