

| TO: | ME-UK | DATE: | 28/10/2016 |
|-----|---|--------|----------------|
| | ME-Italy, ME-RUS | FROM: | MEU Mktg / Eng |
| | ME-France | | SZ, MG |
| | ME-CE | DEPT.: | SEMI |
| CC: | MK, WH, HN, BK, BU, JN, ST, SB, IL, DC, SR, | | |
| | TGH, JL, MG, SZ | | |

PRODUCT DISCONTINUATION NOTIFICATION

| PDN number : | PDN - H - 03 - 16 |
|--------------|-------------------|

Herewith we want to inform you about the product discontinuation for the following device:

| a) Mitsubishi type number (device family): | some SiRF devices (listed in the attached Excel) (selected RAxxxxxxxx-xxx and RDxxxxx-xxx). | | |
|---|--|--|--|
| b) Old Mitsubishi type number: | RA-modules and RA-transistors with suffixes -100, -101, -201, -T113, -T212, -T214, -T1105. Detailed type numbers see attached Excel list. | | |
| c) New Mitsubishi type number: | Partly replaced by new modules / transistors. Partly no direct replacement. New suffixes are: - 500, -501, -501, -T513, -T512, -T514, -T5105. Detailed type numbers see attached Excel list. | | |
| d) Expected last order for discontinued device: | 30. June 2017 (Last Time Buy) | | |
| e) Date of production stop: | 31. March 2018 (Last Shipment) | | |
| f) Customer spec. /part number: | All suffixes included | | |
| g) Remarks: | Affected type numbers see attached Excel list. This PDN is caused by the discontinuation of the Renesas Kochi Silicon chip factory. A new chip supplier was selected and qualified. | | |

(Signature of responsible Manager)

Note: Please comment until 25. November 2016. Otherwise we regard the PDN as accepted.

to MEU customers

Prepared:

Approved:

RF Device Department, Products Division

Miyoshi Electronics Corporation

Reliability test plan for New fab Devices

| | Package Type | Tested Model Number | Issue date of Reliability Test Report | Test item |
|----------|--------------|---------------------|--|--|
| Module | H2M | RA60H3847M1 | Jan. 2017 | High temperature storage Low temperature storage Humidity storage Temperature cycling |
| Discrete | SLP | RD07MUS2B | Nov. 2016 | Resistance to Soldering heat (Pre-treatment) High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | SOT89 | RD02LUS2 | Feb. 2017 | Resistance to Soldering heat (Pre-treatment) High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | РММ | RD07MUP2B | Feb. 2017 | Resistance to Soldering heat (Pre-treatment) High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | НРМ | RD35HUF2 | Dec. 2016 | Resistance to Soldering heat (Pre-treatment) High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | HPM2 | RD35HUP2 | Dec. 2016 | Resistance to Soldering heat (Pre-treatment) High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | TO220 | RD16HHF1 | Aug. 2017 | High temperature storage Low temperature storage Humidity storage Temperature cycling |
| | Ceramic | RD100HHF1C | Mar. 2017 | High temperature storage Low temperature storage Humidity storage Temperature cycling |