



PRODUCT / PROCESS CHANGE NOTIFICATION

XDLF AMKOR: new and additional TSSOP8 assembly & test line for CMOSF8H+ Industrial Range EEPROM

What is the change?

The EEPROM products (industrial range) processed with CMOSF8H+ process technology at ST Rousset (France) and assembled/tested in TSSOP8 package at ST Shenzhen (China) will be also assembled/tested on new AMKOR *extra high density lead frame* (XDLF) assembly line.

Why?

The strategy of STMicroelectronics Memory Division is to support our customers on a long-term basis. In line with this commitment, the qualification of the AMKOR new XDLF TSSOP8 assembly line for the EEPROM products (industrial range) in CMOSF8H+ will increase the production capacity throughput and consequently improve the service to our customers.

When?

The production of the EEPROM (industrial range) in CMOSF8H+ on the new XDLF TSSOP8 assembly line at AMKOR will ramp up from August 2019 and shipments can start from October 2019 onward (or earlier upon customer approval).

How will the change be qualified?

The EEPROM products (industrial range) in CMOSF8H+ assembled on the new XDLF TSSOP8 assembly line at AMKOR will be qualified following the standard ST Microelectronics Corporate Procedures for Quality & Reliability.

Qualification Report QRMMY1514 will be available week 29 / 2019.

What is the impact of the change?

- **Form:** Marking change
- **Fit:** No change
- **Function:** No change

How can the change be seen?

- BOX LABEL MARKING

On the BOX LABEL MARKING, the difference is visible inside the **Finished Good Part Number** where the “**Assembly and Test & Finishing plants**” identifier is “**X**” for products assembled on XDLF line at **AMKOR**, this digit being “**T**” for current products assembled at ST Shenzhen. Also **Country of origin** will change from China to **Philippines**. In the **Trace code**, the identifiers for “**Assembly country & plant**” and “**Test & Finishing country & plant**” will change from “**GK**” to “**7B**”.

→ Example for M24C16-RMN6TP

STMicroelectronics

Manufactured under patents or patents pending

Country Of Origin: **Philippines**

Pb-free 2nd Level Interconnect

MSL: 1 NOT MOISTURE SENSITIVE

PBT: 260 °C Category: e4 ECOPACK2/ROHS

TYPE: **M24C16-RDW6TP**
 M24C16-RDW6TP/T X A

Total Qty: **4000**


Process Technology:
"T" for CMOSF8H+

Wafer fab / Mask revision

Trace Codes **7BYWWLLL WX 7B**

Marking **416RT**

Bulk ID **X0X00XXX0000**


Please provide the bulk ID for any inquiry

Assembly and Test & Finishing plant:

- “X” for AMKOR subcon (Philippines)
- “T” for ST Shenzhen (China)

How can the change be seen?

- TSSOP8 DEVICE MARKING

The difference is visible inside the Trace Code *PYWW* (*) where the first digit *P* for *Assembly plant* is “**B**” for AMKOR, this digit being “**K**” for current ST Shenzhen assembly plant.

**New
Assembly & Test
at AMKOR**

**Current
Assembly & Test
at ST SHENZHEN**

Example:
M24C16-RDW6TP



(*) Legend:

P = Assembly plant
Y = Assembly year
WW = Assembly week

Appendix A- Product Change Information

Product family / Commercial products:	EEPROM (industrial range) from CMOSF8H+ process in TSSOP8
Customer(s):	All
Type of change:	New assembly line
Reason for the change:	Second source creation
Description of the change:	AMKOR subcontractor (Philippines) new assembly line for all EEPROM (industrial range) in TSSOP8 / CMOSF8H+
Forecast date of the change: (Notification to customer)	Week 27 / 2019
Forecast date of <u>Qualification samples</u> availability for customer(s):	See Appendix B
<u>Qualification Report</u> availability:	Qualification Report QRMMY1514 will be available week 29 / 2019.
Marking to identify the changed product:	First digit of traceability code is “B” when last digit of product marking is “T”.
Description of the qualification program:	Standard ST Microelectronics Corporate Procedures for Quality and Reliability
Product Line(s) and/or Part Number(s):	See Appendix B
Estimated date of first shipment:	Week 40 / 2019

Appendix B: Concerned Commercial Part Numbers:

Commercial Part Numbers	Samples availability
M24C01-RDW6TP	On request
M24C01-WDW6TP	On request
M24C02-FDW6TP	On request
M24C02-RDW6TP	Week 29 / 2019
M24C02-WDW6TP	Week 29 / 2019
M24C04-FDW6TP	Week 29 / 2019
M24C04-RDW6TP	On request
M24C04-WDW6TP	On request
M24C08-FDW6TP	Week 29 / 2019
M24C08-RDW6TP	Week 29 / 2019
M24C08-WDW6TP	On request
M24C16-FDW6TP	Week 29 / 2019
M24C16-RDW6TP	Week 29 / 2019
M24C16-WDW6TP	Week 29 / 2019
M24C32-FDW6TP	Week 29 / 2019
M24C32-FDW6TP/C	On request
M24C32-RDW6TP	Week 29 / 2019
M24C32-WDW6TP	On request
M24C64-FDW6TP	Week 29 / 2019
M24C64-RDW6TP	Week 29 / 2019
M24C64-WDW6TP	On request
M24128-BRDW6TP	On request
M24128-BWDW6TP	On request
M34E02-FDW6TP	On request

Appendix C: BOM comparison:

Material	New BOM at AMKOR	Current BOM at ST Shenzhen
LEAD FRAME	Post-plated mat Tin	Pre-plated 4 layers NithPdAgAu
MOLDING COMPOUND	SUMITOMO G700LS	SUMITOMO G700KC
COPPER WIRE	0.8 mil (*)	0.8 mil (**)
GLUE DIE ATTACH	Ablestik 8290	Ablestik QMI550

(*) Palladium Coated Copper
(**) Bare Copper

