

Extension of AMKOR XDLF SO8N assembly & test line usage to CMOSF8H Industrial Range EEPROM (M24256, M24512, M24M01, M24M02, M95256, M95512, M95M01, M95M02)

What is the change?

The EEPROM products (industrial range) processed with CMOSF8H process technology (M24256, M24512, M24M01, M24M02, M95256, M95512, M95M01, M95M02) at ST Rousset (France) and assembled/tested in SO8N package at ST Shenzhen (China) and at Amkor (Philippines) on HDLF line will be also assembled/tested on AMKOR *extra high density lead frame* (XDLF) assembly line.

This XDLF line is already qualified and running in full production for the manufacturing of CMOSF8H+ EEPROM (PCN MMS-MMY/14/8411, associated Qualification Report QRMMY1304).

Why?

The strategy of STMicroelectronics Memory Division is to support our customers on a long-term basis. In line with this commitment, the extension of the AMKOR XDLF SO8N assembly line usage for the EEPROM products (industrial range) in CMOSF8H will increase the production capacity throughput and consequently improve the service to our customers.

When?

The assembly of the EEPROM products in SO8N on the XDLF line will ramp up from Week 48/2018 and shipments can start from Week 01/2019 onward

How will the change be qualified?

The assembly and the functional test of M24256, M24512, M24M01, M24M02, M95256, M95512, M95M01, M95M02 on the XDLF line at AMKOR will be qualified following the standard ST Microelectronics Corporate Procedures for Quality and Reliability.

What is the impact of the change?

- **Form:** no change
- **Fit:** no change
- **Function:** no change

- BOX LABEL MARKING

How can the change be seen?

The change is visible on the **BOX LABEL MARKING**, inside the **Finished Good Part Number**:
the **Assembly and Test & Finishing plant** identifier is **"X"** for the **SO8N XDLF line**.

→ Example for M24512-RMN6TP

STMicroelectronics

Manufactured under patents or patents pending
Assembled in: Philippines
Pb-free 2nd Level Interconnect
MSL: 1 NOT MOISTURE SENSITIVE

PBT: 260 °C Category: e4 ECOPACK2/ROHS

TYPE: **M24512-RMN6TP**
M24512-RMN6TP K X B

Total Qty: **2500**

Process Technology

Mask revision and/or wafer diffusion plant

Assembly and Test & Finishing plant:
"X" for new XDLF line (was G, H or B for current assembly lines)

Trace Codes PPYWLLL WX TF

Marking 24512RP

Bulk ID X0X00XXX0000



Please provide the bulk ID for any inquiry

Appendix A- Product Change Information

Product family / Commercial products:	EEPROM in SO8N from CMOS F8H process: M24256, M24512, M24M01, M24M02, M95256, M95512, M95M01, M95M02
Customer(s)	All
Type of change	Package assembly process change
Reason for the change	Capacity increase
Description of the change	Extension of XDLF assembly line (AMKOR) usage
Forecast date of the change	Week 40 / 2018
Forecast date of <u>Qualification samples availability</u> for customer(s)	-> Week 46/2018 for M24256, M24512, M24M01 & M95512 -> Week 51/2018 for M95256 & M95M01 -> March 2019 for M24M02 & M95M02
Forecast date for the internal STMicroelectronics change, <u>Qualification Report availability</u>	-> Week 46/2018 for M24256, M24512, M24M01 & M95512 -> Week 51/2018 for M95256 & M95M01 -> March 2019 for M24M02 & M95M02
Marking to identify the changed product	Finished Good Marking on Box Label
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
Manufacturing location	AMKOR (Philippines)
Estimated date of first shipment	Week 01 / 2019

Appendix B- Concerned Commercial Part Numbers:

Commercial Product	Qualification report	Qualification samples
M24256-BRMN6TP	Week 46 - 2018	Week 46 - 2018
M24256-BWMN6TP	Week 46 - 2018	Week 46 - 2018
M24256-DFMN6TP	Week 46 - 2018	Week 46 - 2018
M24512-DFMN6TP	Week 46 - 2018	Week 46 - 2018
M24512-RMN6TP	Week 46 - 2018	Week 46 - 2018
M24512-WMN6TP	Week 46 - 2018	Week 46 - 2018
M24M01-DFMN6TP	Week 46 - 2018	Week 46 - 2018
M24M01-RMN6TP	Week 46 - 2018	Week 46 - 2018
M24M02-DRMN6TP	March 2019	March 2019
M95256-DFMN6TP	Week 51 - 2018	Week 51 - 2018
M95256-RMN6TP	Week 51 - 2018	Week 51 - 2018
M95256-WMN6TP	Week 51 - 2018	Week 51 - 2018
M95512-DFMN6TP	On request	Week 46 - 2018
M95512-RMN6TP	Week 46 - 2018	Week 46 - 2018
M95512-WMN6TP	Week 46 - 2018	Week 46 - 2018
M95M01-DFMN6TP	On request	Week 51 - 2018
M95M01-RMN6TP	Week 51 - 2018	Week 51 - 2018
M95M02-DRMN6TP	March 2019	March 2019

Extension of AMKOR XDLF SO8N assembly & test line usage
to CMOSF8H Industrial Range EEPROM (M24256, M24512, M24M01, M24M02, M95256, M95512, M95M01, M95M02)

Document Revision History		
Date	Rev.	Description of the Revision
Sept. 25, 2018	1.00	First draft creation – Christian POLI

Source Documents & Reference Documents		
Source document Title	Rev.:	Date: