



# PRODUCT INFORMATION LETTER

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PIL MMS-MIC/13/8156  
Dated 16 Oct 2013

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**STM32F2xx EMI characteristics update**

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|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Sales Type/product family label                                                              | STM32F2xx products                                                                                                         |
| Type of change                                                                               | Product electrical spec. change                                                                                            |
| Reason for change                                                                            | datasheets correction                                                                                                      |
| Description                                                                                  | EMI characteristic table in STM32F2xx datasheets will be updated in order to be in line with the real silicon performance. |
| Forecasted date of implementation                                                            | 09-Nov-2013                                                                                                                |
| Forecasted date of samples for customer                                                      | 09-Oct-2013                                                                                                                |
| Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability | 09-Oct-2013                                                                                                                |
| Involved ST facilities                                                                       | NA                                                                                                                         |

## DOCUMENT APPROVAL

| Name            | Function          |
|-----------------|-------------------|
| Colonna, Daniel | Marketing Manager |
| Buffa, Michel   | Product Manager   |
| Narche, Pascal  | Q.A. Manager      |



## PRODUCT INFORMATION LETTER

### STM32F2xx EMI characteristics update

#### MMS - Microcontrollers Division (MCD)

Dear Customer,

In order to provide a better service to our customers and to improve our STM32F2xx products datasheets, ST MCD division is informing you about an update of EMI characteristics, detailed on datasheets.

#### What is the change?

EMI characteristic table in STM32F2xx datasheets will be updated as following in order to be in line with the real silicon performance:

| Symbol           | Parameter  | Conditions                                                                                                                                                       | Monitored frequency band | Current Datasheet values                     | New Datasheet values                         | Unit |
|------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------|----------------------------------------------|------|
|                  |            |                                                                                                                                                                  |                          | Max Vs [f <sub>HSE</sub> /f <sub>CPU</sub> ] | Max Vs [f <sub>HSE</sub> /f <sub>CPU</sub> ] |      |
|                  |            |                                                                                                                                                                  |                          | 8/120MHz                                     | 25/120MHz                                    |      |
| S <sub>EMI</sub> | Peak level | VDD = 3.3 V, TA = 25 °C, LQFP176 package, conforming to SAE J1752/3 EEMBC, code running with ART enabled, peripheral clock disabled                              | 0.1 to 30MHz             | 21                                           | 25                                           | dBuV |
|                  |            |                                                                                                                                                                  | 30 to 130MHz             | 28                                           |                                              |      |
|                  |            |                                                                                                                                                                  | 130MHz to 1GHz           | 31                                           |                                              |      |
|                  |            |                                                                                                                                                                  | SAE EMI Level            | 4                                            | 4                                            | -    |
|                  |            | VDD = 3.3 V, TA = 25 °C, LQFP176 package, conforming to SAE J1752/3 EEMBC, code running with ART enabled, PLL spread spectrum enabled, peripheral clock disabled | 0.1 to 30MHz             | 21                                           | 28                                           | dBuV |
|                  |            |                                                                                                                                                                  | 30 to 130MHz             | 15                                           | 26                                           |      |
|                  |            |                                                                                                                                                                  | 130MHz to 1GHz           | 14                                           | 22                                           |      |
|                  |            |                                                                                                                                                                  | SAE EMI Level            | 3.5                                          | 4                                            | -    |

**Why?**

Due to typographic errors, current STM32F2xx products datasheets contain wrong values that do not reflect the real silicon image. Datasheets are revised to be aligned with actual silicon performance.

**When?**

The new datasheets will be implemented on week 45 2013.

**How will the change be qualified?**

This change is already qualified using the standard STMicroelectronics Corporate Procedures for Quality and Reliability.

**What is the impact of the change?**

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

**How can the change be seen?**

STM32F2xx new datasheets versions will implement this change:

- STM32F20x datasheet revision will be changed from rev10 to rev11,
- STM32F21x datasheet revision will be changed from rev8 to rev 9.

We remain available for any complementary information you may need concerning this change.

With our sincere regards.

Michel Buffa

Microcontroller Division General Manager



## Public Products List

PIL Title : STM32F2xx EMI characteristics update

PIL Reference : MMS-MIC/13/8156

PIL Created on : 09-OCT-2013

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change:

### ST COMMERCIAL PRODUCT

|                 |                 |                 |
|-----------------|-----------------|-----------------|
| STM32F205RBT6   | STM32F205RBT7   | STM32F205RCT6   |
| STM32F205RCT6TR | STM32F205RCT7   | STM32F205RET6   |
| STM32F205RET6TR | STM32F205REY6TR | STM32F205RFT6   |
| STM32F205RGT6   | STM32F205RGT6TR | STM32F205RGT6V  |
| STM32F205RGT6W  | STM32F205RGT7   | STM32F205RGY6TR |
| STM32F205VBT6   | STM32F205VCT6   | STM32F205VCT6TR |
| STM32F205VCT7   | STM32F205VCT7TR | STM32F205VET6   |
| STM32F205VET6TR | STM32F205VFT6   | STM32F205VFT6TR |
| STM32F205VGT6   | STM32F205VGT6J  | STM32F205VGT6V  |
| STM32F205VGT6W  | STM32F205VGT7   | STM32F205VGT7TR |
| STM32F205ZCT6   | STM32F205ZCT7   | STM32F205ZCT7TR |
| STM32F205ZET6   | STM32F205ZET6TR | STM32F205ZET7   |
| STM32F205ZET7TR | STM32F205ZFT6   | STM32F205ZGT6   |
| STM32F205ZGT6J  | STM32F205ZGT6TR | STM32F205ZGT6V  |
| STM32F205ZGT6W  | STM32F207ICH6   | STM32F207ICT6   |
| STM32F207IEH6   | STM32F207IEH6TR | STM32F207IET6   |
| STM32F207IFH6   | STM32F207IFT6   | STM32F207IGH6   |
| STM32F207IGH6J  | STM32F207IGH6TR | STM32F207IGH7   |
| STM32F207IGT6   | STM32F207IGT6U  | STM32F207IGT7   |
| STM32F207VCT6   | STM32F207VCT6TR | STM32F207VCT7   |
| STM32F207VET6   | STM32F207VET6TR | STM32F207VFT6   |
| STM32F207VFT6TR | STM32F207VGT6   | STM32F207VGT6J  |
| STM32F207VGT6TR | STM32F207VGT6U  | STM32F207VGT7   |
| STM32F207ZCT6   | STM32F207ZET6   | STM32F207ZET6TR |
| STM32F207ZFT6   | STM32F207ZGT6   | STM32F207ZGT6J  |
| STM32F207ZGT6TR | STM32F207ZGT6U  | STM32F207ZGT7   |
| STM32F215RET6   | STM32F215RGT6   | STM32F215RGT6TR |
| STM32F215VET6   | STM32F215VGT6   | STM32F215ZET6   |
| STM32F215ZGT6   | STM32F217IEH6   | STM32F217IET6   |
| STM32F217IGH6   | STM32F217IGT6   | STM32F217VET6   |
| STM32F217VET6TR | STM32F217VGT6   | STM32F217VGT6TR |
| STM32F217ZET6   | STM32F217ZGT6   |                 |

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