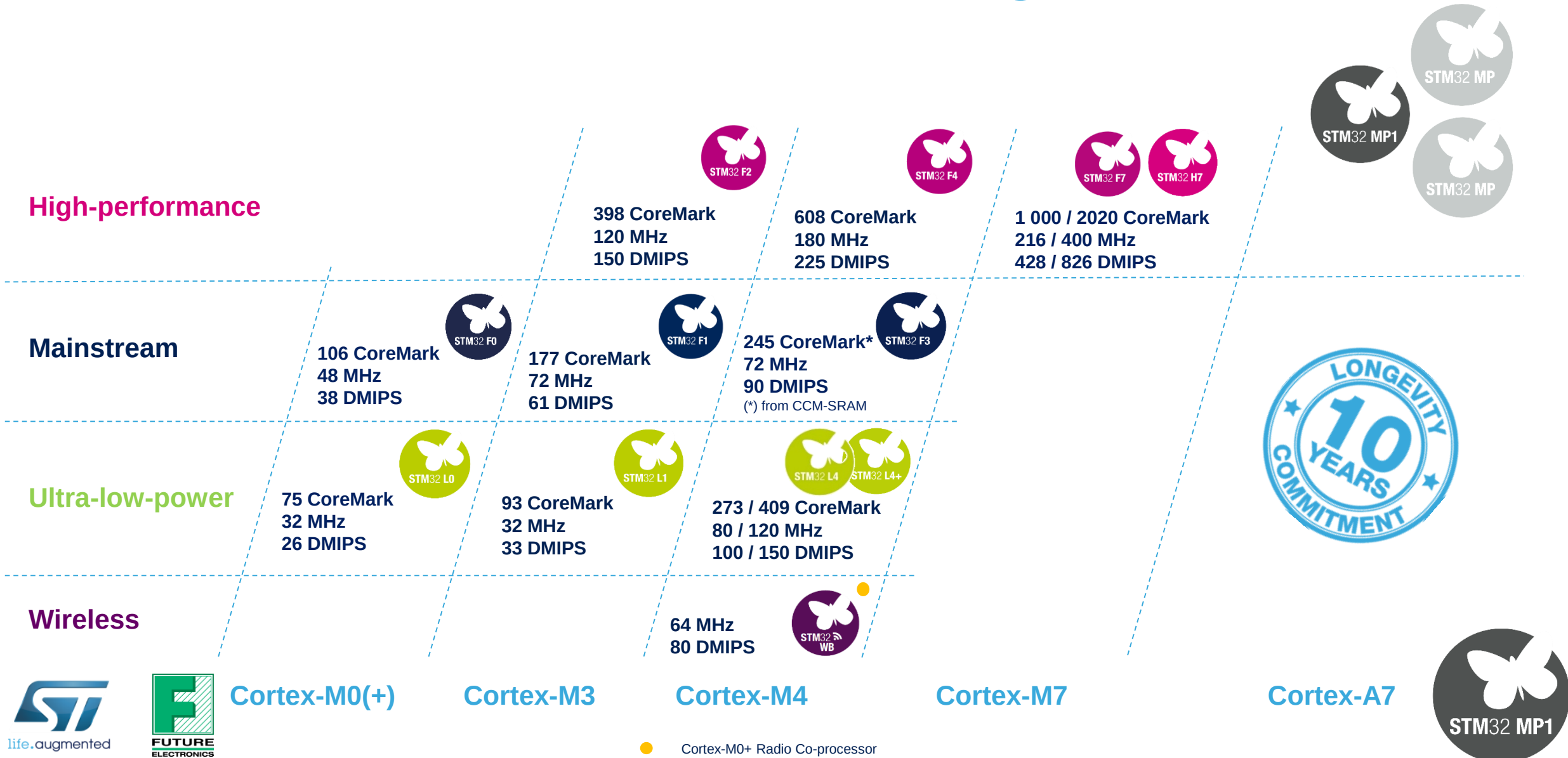


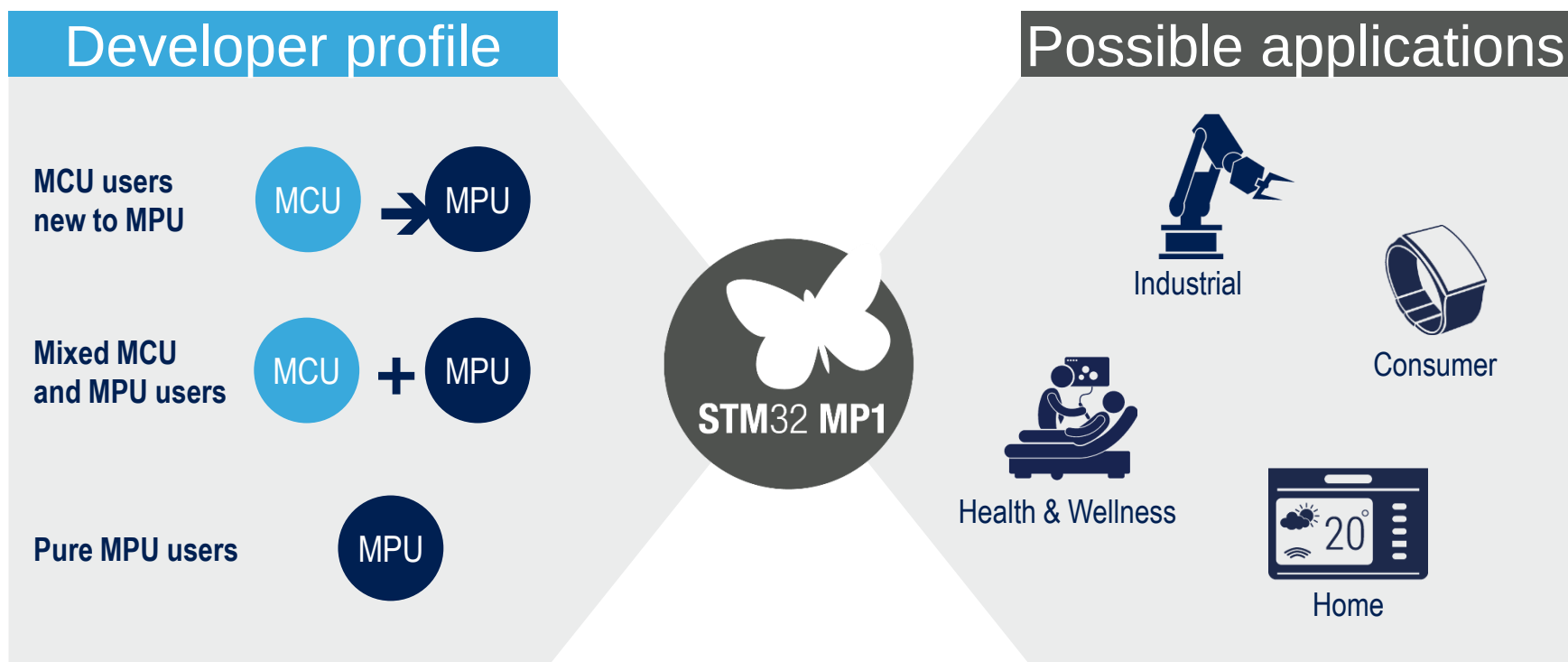
Embedded Processing Continuum

1



STM32MP1: A General Purpose MPU

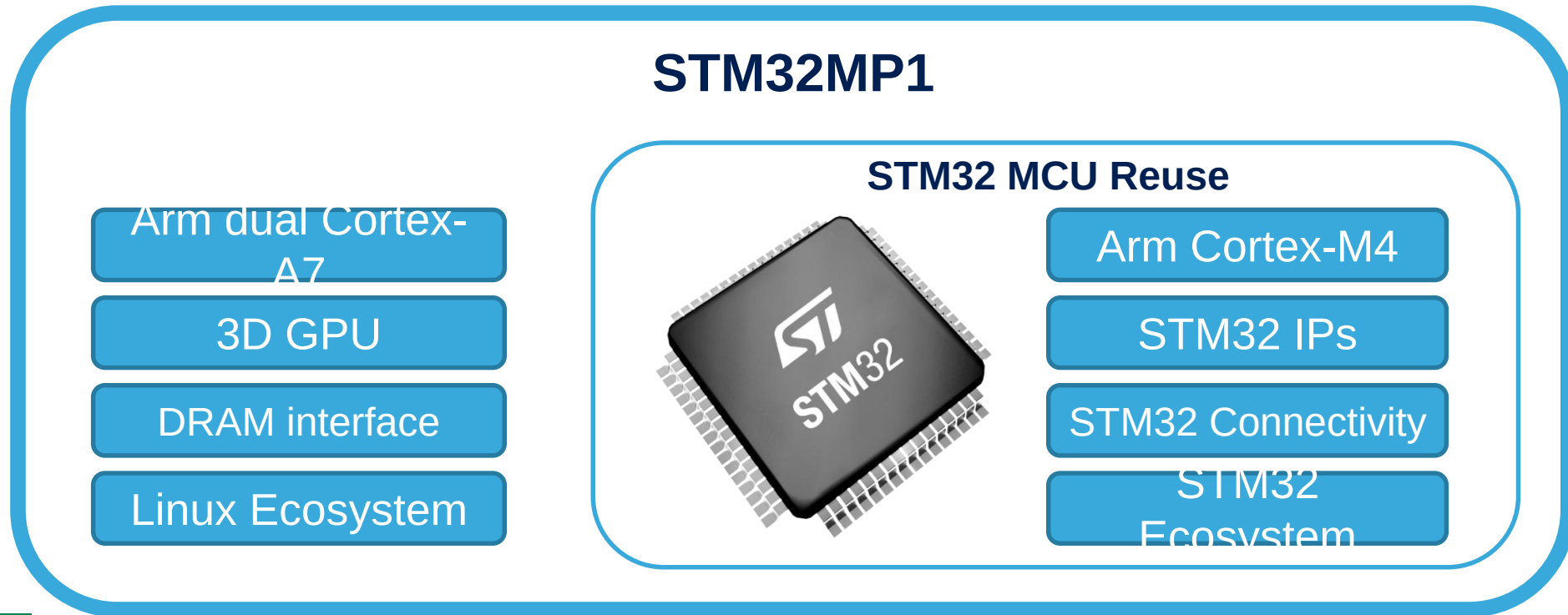
Suitable for all Developer Types and Multiple Applications



STM32MP1 Product Positioning

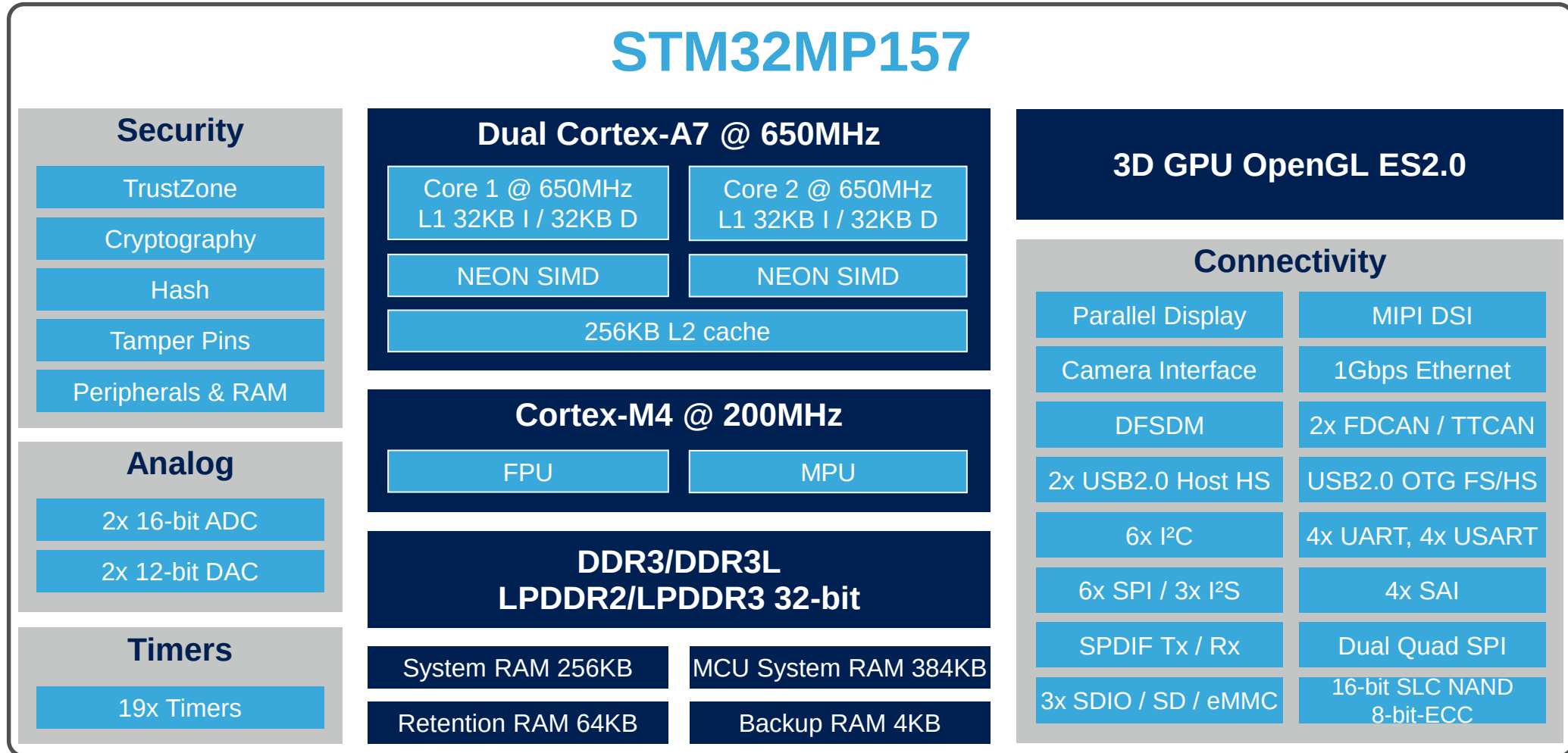
3

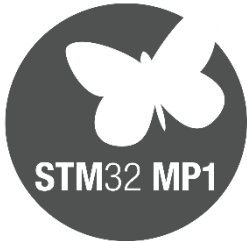
- Roadmap extension of STM32H7 and 1st ST's Mass Market GP MPU
- Low to Mid range MPU class



STM32MP1 Block Diagram

4





STM32MP15x Part Numbers

5

ARM® Cortex®-A7 – 650 MHz	ACCELERATION - Dual core* ARM® Cortex®-A7 processor - L1 and L2 caches 3D Graphic Processing Unit* - Floating Point Unit + ARM® NEON™ - ARM® Cortex®-M4 200MHz coprocessor - MDMA + DMA - LPDDR2/LPDDR3 16/32**-bits 533MHz - DDR3/DDR3L 16/32**-bits 533MHz CONNECTIVITY 2 x USB2.0 HS Host - USB2.0 OTG FS/HS 3 x SDMMC/SDIO - USART, UART, SPI, I²C 2 x (TT)FD-CAN2.0* - Gigabit Ethernet IEEE 1588*** - FMC (NAND Flash) - Camera I/F - Dual mode Quad-SPI - DSI 2Gbit/s*	Product line	Cortex®-A7 cores	f _{CPU} (MHz)	Cortex®-M4 core	f _{MCU} (MHz)	f _{GPU} (MHz)	HW Crypto	3D GPU	FDCAN	MIPI®-DSI
		STM32MP151A	1	650	1	200	-				
		STM32MP151C						•			
		STM32MP153A	2	650	1	200	-			2	
		STM32MP153C						•			
		STM32MP157A	2	650	1	200	533		•	2	•
		STM32MP157C						•			

Notes:

* not available in all product lines

packages

** 16/32-bits for LFBGA448 and TFBGA361 packages, 16-bits only for LFBGA354 and TFBGA257

*** 10/100M Ethernet only for LFBGA354 and TFBGA257 packages

STM32MP1 Embedded Software



- OpenSTLinux, Building a strong community of partners for product launch
- Partners who are both involved in MCU and MPU are already committed to STM32MP1
- Moving forward with MPU Key players

STM32MP1 Hardware Solutions

7

Speed-up evaluation, prototyping and design



Available at
\$399



Available at
\$99

Available at
\$69



Evaluation Board

Full feature STM32MP1 evaluation

- STM32MP157A-EV1
- STM32MP157C-EV1

Discovery Board

Flexible prototyping & demo

- STM32MP157A-DK1
- STM32MP157C-DK2
 - + MIPI DSI WVGA display
 - + Wi-Fi/BT combo module

Boards & SoM*s

3rd Parties Boards for prototyping and production

- Board Specification from Linaro (96boards.org)
- Commercial SoM w/ different forms

SYSTEM ON MODULE by EMCRAFT:

*System on Module

<https://www.emcraft.com/som/stm32mp1/stm32mp1-som-pb.pdf>

Releasing your creativity with the STM32

8



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www.st.com/stm32