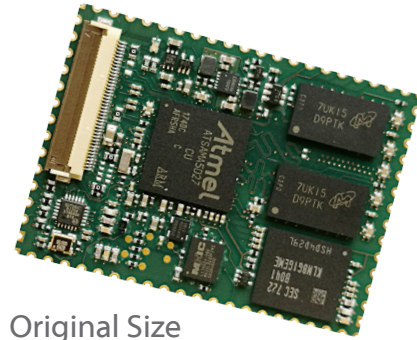
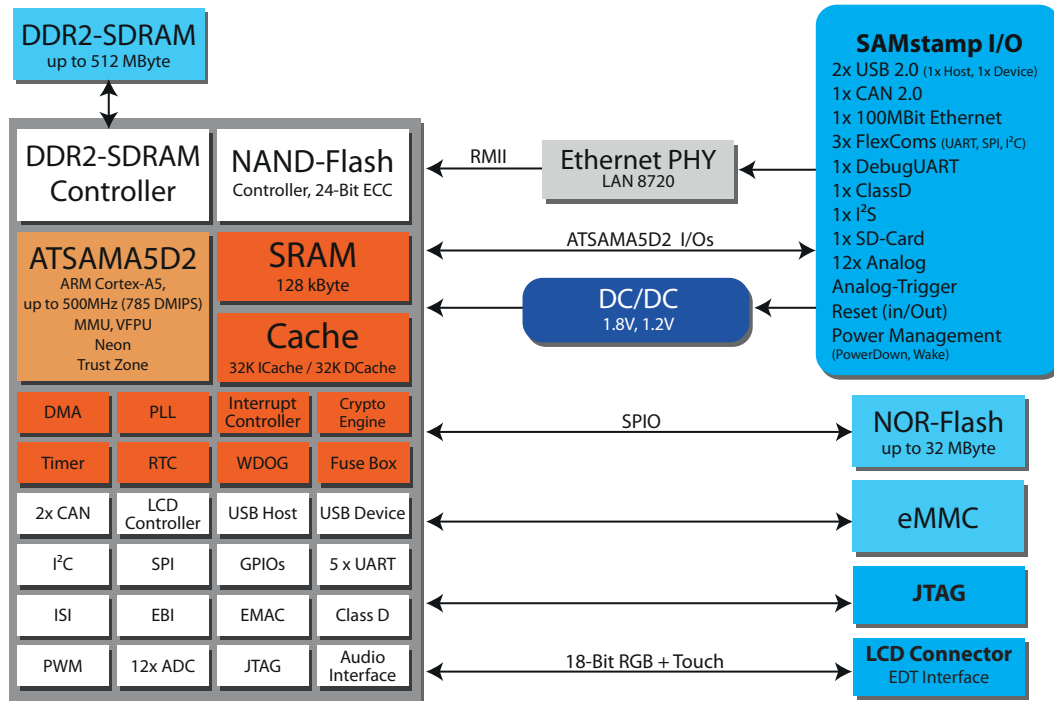


emSTAMP-Helium  
**Security Module**  
based on SAMA5D2



Original Size



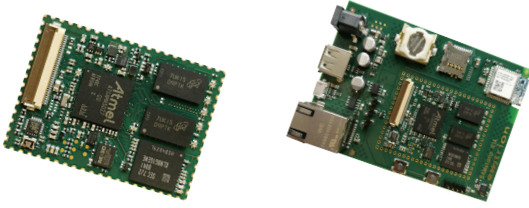
**Getting started with your embedded development!**

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## emSTAMP-Helium

	emSTAMP-Helium	emSTAMP -Helium Developer Kit
		
Operating system	Linux	
CANopen Master/Slave	yes	
EtherNet/IP	yes	
EtherCAT	coming soon	
PROFINET CCB RT1	yes	
Industrial Communication Middleware	GOAL by Port	
CPU manufacturer	MICROCHIP SAMA5D2	
CPU architecture	ARM Cortex-A5	
CPU performance	500 MHz - 785 DMIPS	
Co-Processor	ARM Neon™, VFPU	
Security	Crypto, TRNG, tamper, on-the-fly DDR/QSPI encryption, secure boot, environmental monitors, Trust Zone	
RAM	up to 512 MByte DDR3 SDRAM	
Flash	up to 32 MByte NOR-Flash, up to 16GB eMMC	
Ethernet	1x 100MBit	
FlexComs (UART, SPI, I2C)	3 x	
USB 2.0	1 x Host, 1 x Device	
CAN	1 x	
UART	2 x	
GPIO	34 x	
DebugUART	1 x	
ClassD	1 x	
I <sup>2</sup> S	1 x	
Analog	12 x	
Analog-Trigger	1 x	
PWM	2 x	
LED	green / red	
µSD-Card	-	1 x
TPM v 1.2	-	AT95C3205
Wifi/BT	-	WILC 3000
Power Management (PowerDown, Wake)	yes	
Operating temperature	0...+70°C, opt. -40...+85°C	
Size in mm	53,3 x 38,1	110 x 72
Customer specific solutions	yes	
easy layout integration	2.54mm I/O-Pitch (all Finepitch on CoM)	

Subject to change without notice.  
Rev1: 03/2019



**emtrion GmbH**

Alter Schlachthof 45  
D-76131 Karlsruhe

Tel. +49 (0) 721 62725-0  
Fax +49 (0) 721 62725-19  
E-Mail sales@emtrion.com

Visit us online at:  
[www.emtrion.com](http://www.emtrion.com)