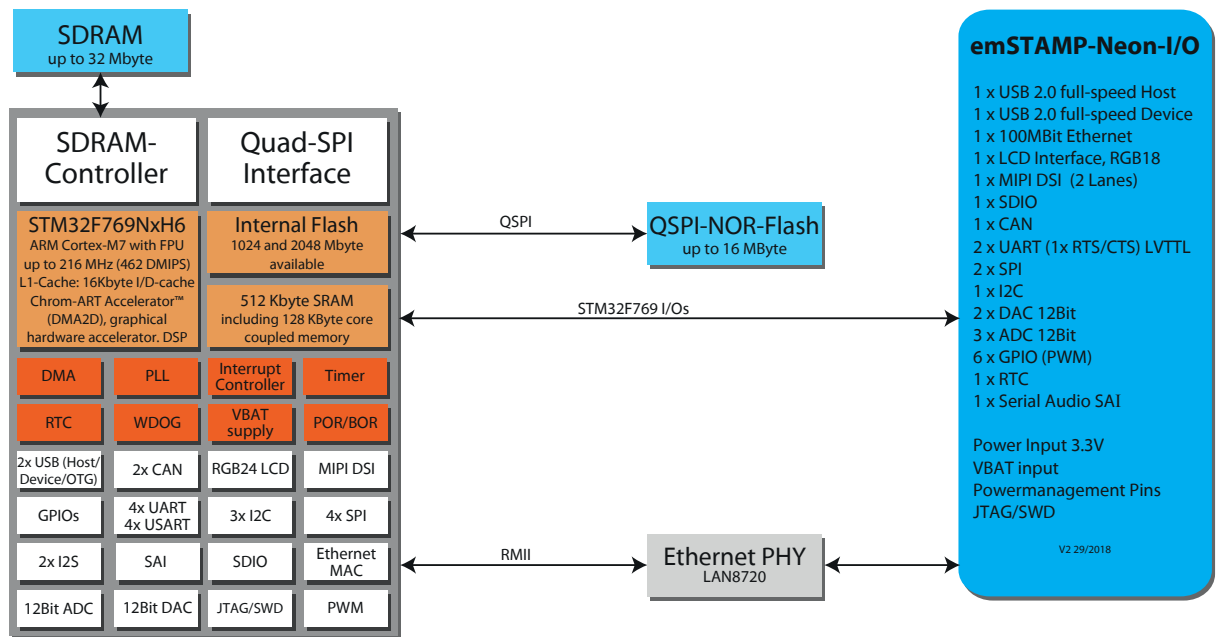


# emSTAMP-Neon-CM7

based on STM32F769NI Cortex-M7 controller



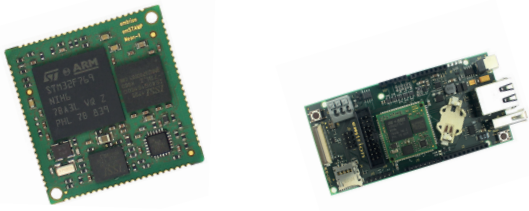
## Getting started with your embedded development!

### Reduce your time to market with emtrion Developer Kits!

With an emtrion developer kit you can easily start your application development and reduce your time to market.

emtrion's engineers are unique experts in hardware and software development. The embedded solutions are all from one source.

## emSTAMP-Neon-CM7

	emSTAMP-Neon-CM7	SBC-Neon-CM7
		
Operating system	FreeRTOS	
Linux	on request	
CANopen Master/Slave	yes	
EtherNet/IP	yes	
DLR („Device Level Ring“)	yes	
EtherCAT	coming soon	
PROFINET CCB RT1	yes	
CPU manufacturer	STMicroelectronics	
CPU architecture	ARM Cortex-M7	
CPU performance	up to 216 MHz - 462 DMIPS	
CPU	STM32F769	
Graphics	Chrom-Art Accelerator (DMA 2D)	
RAM	up to external 32 MByte SDRAM, internal 512 KByte	
Flash	up to 2 MByte internal Flash, QSPI 16 MByte external	
Ethernet	1 x 100 Base-TX	
UART	2 x LVTTTL (1x CTS/RTS)	
USB Host	2.0 full speed	
USB Device	2.0 full speed	
CAN	1 x LVTTTL	1 x with transceiver
I <sup>2</sup> C	1 x	
SAI Audio	1 x	
SPI	2 x	
MMC/SDC	1 x MMC/SD (SDIO)	1 x micro SD
RTC	yes	1 x battery holder with CR1632
LCD DSI	2 data lanes 24-bit RGB	-
LCD	RGB 18-bit	
Input (ADC)	3 x	
Output (DAC)	2 x	
Reset (In)	yes	
GPIO	6 x	
PWM	6 x complementary PWM outputs	
JTAG	yes	
Wake Up (IN)	yes	
PowerOut	-	+5V, +3V3
Size in mm	28 x 28 x 2,5	118 x 54 x 18
max. power consumption	0,36A @ 3V3	2W @ 7V - 12V
Operating temperature	0...+70°C, opt. -40...+85°C	
Customer specific solutions	yes	
easy layout integration	1,0 mm I/O-Pitch	-



Subject to change without notice.  
Rev 1: 09/2019

### Getting started with your embedded development!

#### Reduce your time to market with emtrion Developer Kits!

With an emtrion developer kit you can easily start your application development and reduce your time to market.

emtrion's engineers are unique experts in hardware and software development. The embedded solutions are all from one source.

