

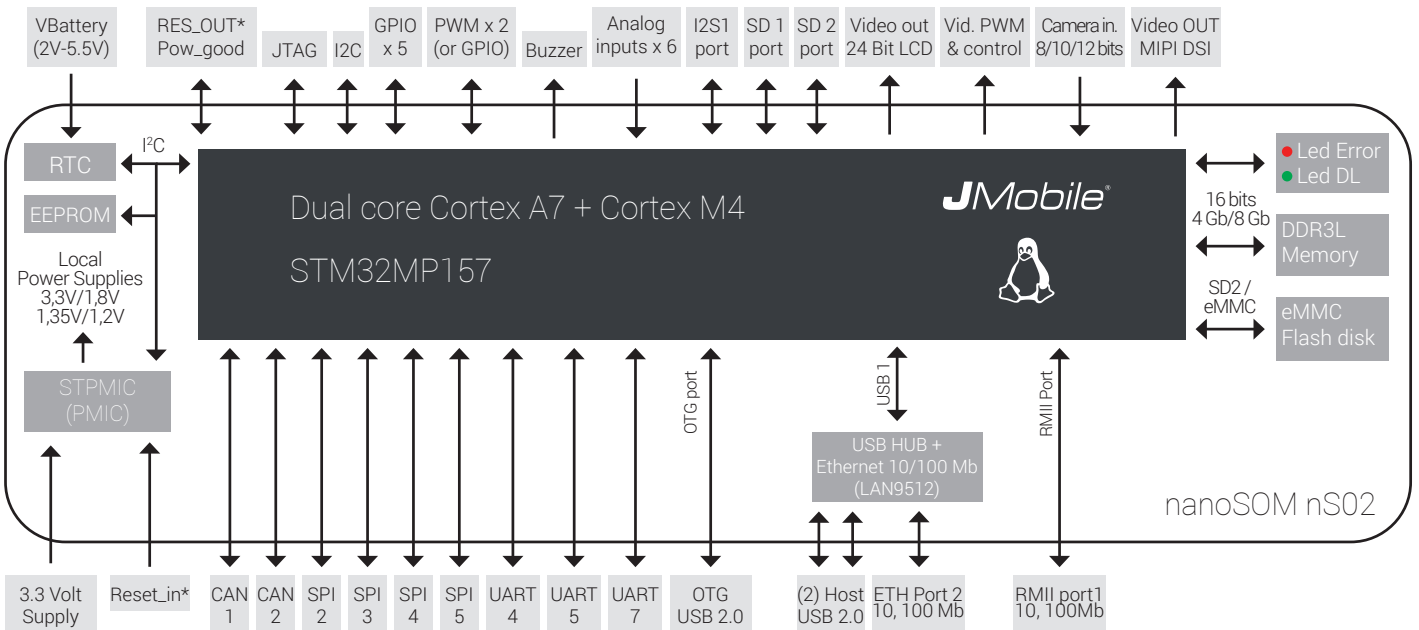
nanoSOM nS02 - Technical Data



**STM32MP157
up to 800 Mhz**

NanoSOM nS02 is highly innovative, high performance very efficient, ultra compact and cost-effective SOM based at Dual Cortex -A7 plus M4 MPU with 3D GPU.

Dimensions	25,4x25,4 mm
Temperature Range	Commercial 0°C to 70°C / Industrial -40°C to +85°C
CPU	STM32MP157 up to 800 Mhz Dual Cortex-A7 plus M4 MPU with 3D GPU.
DDR	Up to 1 GByte high performance DDR3L
Flash Disk	Up to 32 GByte eMMC Flash
EEPROM	512 Bytes x 8
RTC	Yes, Battery or SuperCAP backup
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0), 1 (OTG)
Ethernet	1 (RMII 10/100Mb MAC IEEE1588) and 1 (10/100Mb Direct Line Interface)
SD	2 (via external connectors)
SPI	4
I2C	1
CAN	2
UARTs	3
Audio	1 (I2S Channel)
Video out/Video in	24 bits RGB LCD parallel or 2 lane MIPI DSI Video Input Port (camera port) 8,10,12 Bit
Analog Inputs / GPIO	More Analog Inputs and several programming GPIO signals with interrupt capability. Reserved Pins for Power-Fail, Power Good, Reset IN, Reset Out functions.
HW security	Secure boot, Trust Zone IPs
Power Supply	Single 3,3 Volt / VBB for RTC Backup



Ordering Information

Model	Part Number	Description
nS02-0001	+NS02-0001	STM32MP157 up to 800Mhz - 256MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C
nS02-0002	+NS02-0002	STM32MP157 up to 800Mhz - 512MB DDR3L - 4GB Flash Disk - Operating Temp. -40 to +85°C
nS02-0003	+NS02-0003	STM32MP157 up to 800Mhz - 1GB DDR3L - 8GB Flash Disk - Operating Temp. -40 to +85°C
OpenHMI nS02 Dev. Kit	+EE16EK-0009	5" OpenHMI nS02 Development Kit

Optionally available with different configurations, with different CPU part number, memory sizes and Operating Temperature grades.