

Nord Technology

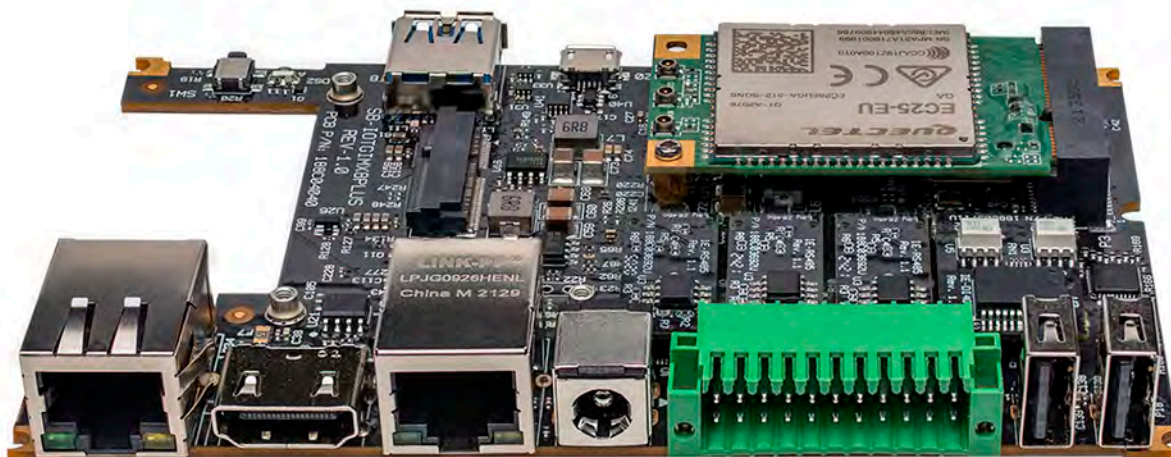
Reseller af Compulab hardware in Denmark

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SBC-IOT-IMX8PLUS - NXP i.MX8M Plus Single Board Computer



SBC-IOT-IMX8PLUS - NXP i.MX8M Plus

Single Board Computer



- "Option" column specifies the configuration code required to have the particular feature.
- "+" means that the feature is always available

CPU Core		
CPU	NXP i.MX8M Plus QuadLite, quad-core ARM Cortex-A53, 1.8GHz	C1800Q
	NXP i.MX8M Plus Quad, quad-core ARM Cortex-A53, 1.8GHz	C1800QM
NPU	AI/ML Neural Processing Unit, up to 2.3 TOPS	C1800QM
Real-Time Co-processor	ARM Cortex-M7, 800Mhz	+
Memory and Storage		
RAM	1GB – 8GB, LPDDR4	D
Primary Storage	16GB – 128GB eMMC flash, soldered on-board	N
Secondary Storage	16GB – 128GB eMMC flash, optional add-on module	FXN
Display and Graphics		
Display Output	DVI-D, up to 1080p60	+
GPU and Video	GC7000UL GPU 1080p60 HEVC/H.265, AVC/H.264	C1800QM
Network		
LAN	2x 1000Mbps Ethernet ports, RJ45 connectors	+
WiFi and Bluetooth	802.11ax WiFi and Bluetooth 5.3 BLE Implemented with Intel WiFi 6E AX210 module 2x 2.4GHz / 5GHz rubber duck antennas	WB
Wireless Mesh	Bluetooth mesh, Thread, Zigbee Implemented with Nordic Semiconductor nRF52840 module installed in expansion connector 2.4GHz rubber duck antenna	FXWMN
Cellular	4G/LTE CAT4 cellular module, Quectel EC25-E (EU bands)	JEC25E
	4G/LTE CAT4 cellular module, Quectel EC25-A (US bands)	JEC25A
	4G/LTE CAT4 cellular module, Quectel EC25-GGD (global bands)	JEG25G
	4G/LTE CAT4 cellular module, Telit LE910C4 (global bands)	JT910G
	SIM card socket	+
GNSS	Cellular rubber duck antenna	JEC25x or JEG25G
	GPS Implemented with Quectel EC25 module	JEC25x or JEG25G
I/O		
USB	2x USB2.0 ports, type-A connectors (back panel)	+
	1x USB3.0 port, type-A connector (front panel)	+
RS485 / RS232	Up-to 3x RS485 (half-duplex) RS232 ports Isolated, terminal-block connector	FxRS4 / FxRS2
CAN bus	1x CAN bus port Isolated, terminal-block connector	+
	Additional 1x CAN bus port Isolated, terminal-block connector	FCCAN
Digital I/O	4x digital outputs + 4x digital inputs Isolated, 24V compliant with EN 61131-2, terminal-block connector	FDIO
Analog Input	4x analog inputs, 0...10V / 4...20mA Isolated, terminal block connector	FXADC
Debug	1x serial console via UART-to-USB bridge, micro-USB connector	+
	Support for NXP SDP/UUU protocol, micro-USB connector	+
Expansion Connector	Expansion connector for add-on boards LVDS, SDIO, USB, SPI, I2C, GPIOs	not FXxx
System		
RTC	Real time clock operated from on-board coin-cell battery	+
Watchdog	Hardware watchdog	+
Security	Secure boot, implemented with i.MX8M Plus HAB module	+
	TPM 2.0, Infineon SLB9670 * implemented with add-on board installed in expansion connector	FXTPM or FXADC or FXWMN or FXIMU
LEDs	2x general purpose LEDs	+
PoE	Support for PoE (powered device)	POE
Accelerometer	6-axis MEMS MotionTracking, TDK ICM-42605 * implemented with add-on board installed in expansion connector	FXIMU
Electrical Specifications		
Supply Voltage	Unregulated 8V to 36V	
Mechanical Specifications		
Dimensions	125 x 80 x 25 mm	
Heat-plate	Aluminum heat-plate, 130mm x 80mm * only with "H" configuration option	
Weight	210 gram	
Reliability and Environmental		
MTTF	> 200,000 hours	
Warranty	5 years	
Operation Temperature	Commercial: 0° to 60° C Industrial: -40° to 80° C	
Storage Temperature	-40° to 85° C	
Relative Humidity	10% to 90% (operation)	
	05% to 95% (storage)	