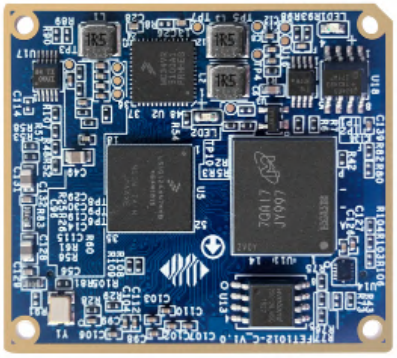
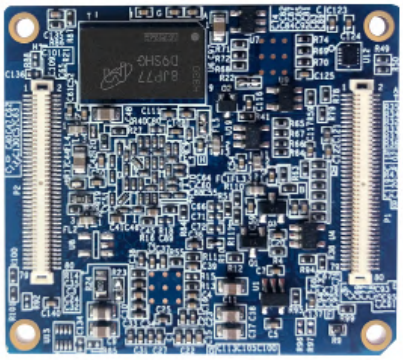
FET1012A-C SoM

DESCRIPTION

FET1012A-C system on module(SoM) is designed based on NXP Cortex -A53 featuring processor LS1012A @ 800MHz. It consists of carrier board and SoM and integrates with multiple high-speed peripherals include gual gigabit Ethernet PHYs with hardware packet acceleration engine, SATA3.0, PCIe2.0, USB3.0, TF card and other interfaces. It's specially supported with Ubuntu and OpenWRT and aimming at NAS, IoT gatway. broadband Ethernet gateway and industrial automation markets.

SoM FET1012A-C Features			
CPU	NXP LS1012A	Ethernet	⩽ 2, 10/ 100/ 1000Mbps
Architecture	Cortex-A53	PCIe2.0	⩽ 1, up to 5Gbps, can be used for Gigabit Ethernet or dual-band WiFi expanding
Frequency	⩽ 1GHz	SATA3.0	⩽ 1, up to 6Gbps
RAM	512MB DDR3L	USB3.0	1, up to 5Gbps
ROM	8GB eMMC, 16MB QSPI NorFlash	QSPI	1, for nor flash
OS	Ubuntu-18.04.1/OpenWrt v18.06.0-rc2	SAI	⩽ 5
Voltage input	4.2V	UART	⩽ 2, contains one debug port
Working Temp	-40°C ~ +80°C	IIC	⩽ 1
Package	board to board connector	SDHC	1, for storage expanding
Dimensions	45mm x 40mm	JTAG	supports CodeWarrior TAP from NXP





OK1012A-C Carrier Board Features	
Ethernet	2, 10M/ 100M/ 1000Mbps
PCIe2.0	⩽ 1, up to 5Gbps, can expand Gigabit Ethernet by RTL8211 or expand dual-band WiFi by WLE900VX
SATA3.0	⩽ 1, up to 6Gbps
USB3.0	1, up to 5Gbps
QSPI	1, for NOR Flash
UART	⩽ 2
RTC	supported
TF Card	1, for storage expanding
JTAG	1, recommended models: NXP CodeWarrior TAP

TARGET APPLICATION

Industrial router, NAS, industrial automation, edge computing, smart city, IoT gateway, etc.