

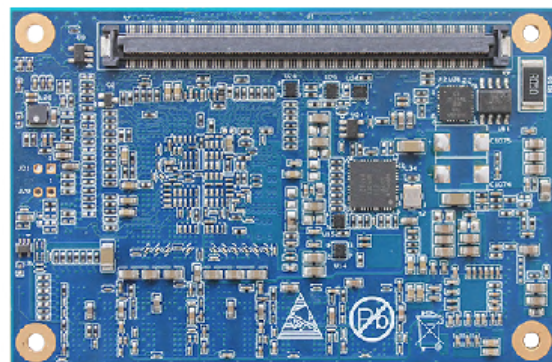
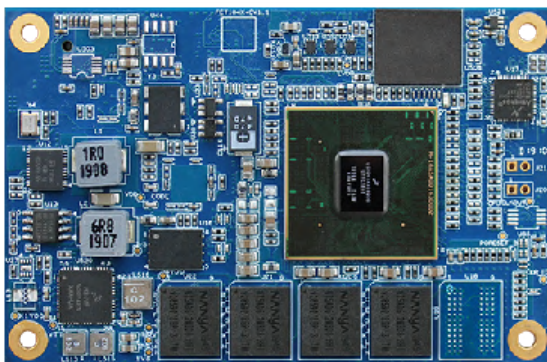


# FET1043A-C SoM

## DESCRIPTION

FET1043A-C system on module(SoM) is based NXP Cortex -A53 featuring quad-core processor LS1043A with frequency up to 1.6GHz has 7 native Ethernet interface(1x 10Gbps and 6x 1000Mbps), it has PCIe2.0, SATA3.0, USB3.0, UART, IIC and other peripherals ready-to-use and supports both Ubuntu and OpenWRT. It is applicable for router, IoT gateway, IP-PBX and other similar products, and fields such as edge computing, energy related gateway, smart city, industrial automation, video surveillance, etc.

SoM FET1043A-C Features			
CPU	NXP LS1043A	Dimensions	84mm x 55mm
Architecture	Quad-core Cortex-A53	Ethernet	≤ 7, CPU has 7 native MAC, up to 1x 10Gbps and 6x 1Gbps Ethernet
Frequency	≤ 1.6GHz	PCIe2.0	≤ 3, SerDes configurable, 5Gbps
RAM	2GB DDR4	SATA3.0	≤ 1, up to 6Gbps, SerDes configurable
ROM	8GB eMMC, 16MB QSPI NorFlash	USB3.0	≤ 3, up to 5Gbps
OS	Ubuntu-18.04.1/OpenWrt v18.06.0-rc2	UART	≤ 4, contains one debug port
Voltage input	12V	IIC	≤ 2
Working Temp	-40°C ~ +80°C	eSDHC	≤ 1, supports SD3.0 eMMC4.5, multiplexed with eMMC, can be used for card booting or OS installation, but could not used for storage expanding
Package	COM Express (220pin, 0.5mm)	JTAG	supports CodeWarrior TAP from NXP
SerDes	4 SerDes lanes: 3x PCIe2.0 controller;                      1x SATA3.0 controller; 4x SGMII up to 1000Mbit/s;                2x SGMII up to 2500Mbit/s; 1x SFI(10GbE);                                1x QSGMII		



## OK1043A-C3 Carrier Board Features

Ethernet 1Gbps	6, 10M/ 100M/ 1000M, 4 from QSGMII and 2 from RGMII
SFP+	up to 10Gbps, can support SFP+ optical module and electrical module
M.2 M key	1, contains PCIe2.0 x1, for static hard disk
M.2 E key	1, contains PCIe x1, can be mounted with WiFi module
M.2 B key	1, contains USB3.0 and SIM, for 5G wireless module
USB 3.0	1, up to 5Gbps
UART	TTL, 3-wire serial
Debug	1, RS232
4G	Mini PCIe socket, perserved with USB signal and SIM card slot, only for 4G wireless module
TF Card	Multiplexed with eMMC, can be used for uboot guiding, but could not for storage expanding

## TARGET APPLICATION

Industrial IoT, TSN, SD-WAN, 5G CPE, edge computing, gateway, IP- PBX, smart factory, information security, intelligent transport, power management, etc.

