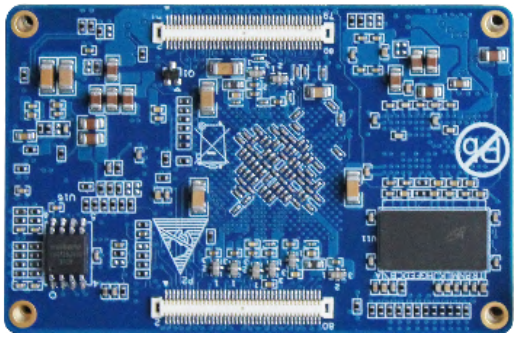
FET1028A-C SoM

DESCRIPTION

FET1028A-C SoM(system on module) is based on Cortex-A72 featuring dual-core processor LS1028A up to 1.5G Hz. It carries on-board 2GB DDR4 RAM and 8GB eMMC, can support 6 Gigabit Ethernet ports with TSN, 2 CAN-FD, USB3.0, UART, SPI, IIC, LVDS, TF card slot, SATA3.0, Headphone peripheral sources, DP can support 4K display output. It could be widely used into industrial router, TSN, SD-WAN, 5G CPE, edge computing, IP-PBX, IoT, smart transportation, power management and other related applications.

SoM FET1028A-C Features			
CPU	NXP LS1028A	eSDHC	⩽ 1, SD3.0
Architecture	Cortex-A72	Ethernet	⩽ 6, CPU has 6 native MAC each up to 2.5Gbps, can support TAN, and one has 4-lane TSN switch
Frequency	1.5GHz	PCIe3.0	⩽ 2, up to 8GT/s, SerDes configurable
RAM	2GB DDR4	SATA3.0	⩽ 1, up to 6Gbps, SerDes configurable
ROM	8GB eMMC	USB3.0	⩽ 2, up to 5Gbps
OS	Ubuntu18.04	UART	⩽ 4, 1x DUART or 4x UART
Voltage input	DC 12V	CAN FD	⩽ 2
Working Temp	-40°C ~ +85°C	IIC	⩽ 6
Package	2x 80-pin connector, pitch 0.5mm	SPI	⩽ 2
Dimensions	42mm × 65mm	IIS	⩽ 6
Display Port	⩽ 1, DP1.3 and eDP1.4, up to 4Kp60		
SerDes	1x 4-lane SerDes, combinations of SGMII, QSGMII, PCIe and SATA are configurable; frequently combinations: A. SGMII+QSGMII+PCIe2.0 x1+SATA3.0 B. PCIe3.0 x1+QSGMII+PCIe3.0 x2 C. SGMII+QSGMII+PCIe3.0 x2 D. PCIe3.0 x2+ E. SGMII+QSGMII+PCIe3.0 x1+PCIe3.0 x1 F. PCIe3.0 x4		



OK1028A-C Carrier Board Features			
Ethernet	5, RJ45 connector, 10M/ 100M/ 1000Mbps, all support TSN	UART	1, 3-wire serial, 3.3V
USB Host	1, USB3.0, Super-speed(5 Gbit/s)	CAN	2, CAN2.0B and CAN FD, 5Mbit/s
LVDS	1, single 8-bit or dual 8-bit LVDS	SPI	1, full duplex, host/ slave mode optional
Audio	1, 1x Phone,	IIC	2, 100/ 400Kbps
PCIe	1, M.2 key E socket, PCIe Gen2, available for 2.4G and 5G WiFi module	TF Card	1, compatible with SD3.0(UHS-I)
SATA	1, SATA3.0, 1.5Gb/s~ 6.0Gb/s	LED	2, programmablem, controlled by GPIO
4G	1, Mini PCIe socket, optional with 5G	PWM	1, for LVDS display backlight
5G	1, M.2 key B socket, optional with 4G	UART Debug	1, RS232, DB9 connector

TARGET APPLICATION

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