# FET1052-C SoM

DESCRIPTION

FET1052-C system on module is based on NXP Cortex-M7 i.MX RT1050 series processor, the one we use is i.MX RT1052. It operates at speeds up to 528MHz to provide high CPU performance and best real-time response. The i.MX RT1052 processor has 512 KB on-chip RAM,which can be flexibly configured as TCM or general-purpose on-chip RAM.The SoM can work stable in environment ranges from -40 to +85 celsius degree, the SoM is designed with a couple of 80-pin connectors with pitch of 0.8mm, all 160pins of the processor are drawn out with GPIO up to 124 pins. Other peripheral pins like UART, Ethernet, USB, CAN, PWM, ADC, LCD and CAMERA are all available. What's more, OS uClinux is supported very well.

SoM FET1052-C Features			
CPU	NXP i.MX RT1052	UART	8
Architecture	Cortex-M7	CAN	2
Frequency	528MHz	IIC	4
RAM	SRAM 512KB; SDRAM 16MB/32MB	SPI	4
ROM	QSPI Nor Flash 4MB/16MB	Camera	1 x DVP
OS	uCLinux, FreeRTOS, RT-Thread, bare metal	SD/SDIO	2
Voltage input	5V	USB	2
Working Temp	-40℃ ~ +85℃	PWM	32
Package	board to board connector(2x 80-pin, 0.8mm)	SPDIF	1
Dimensions	31mm x 43mm	SWD	1
Display	1 x RGB	Keypad port	1, 8* 8 keypad
SAI	3	ADC	20
Ethernet	1,10/100Mbps auto-negotiable	QSPI	2
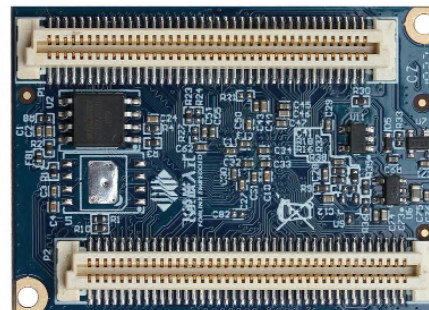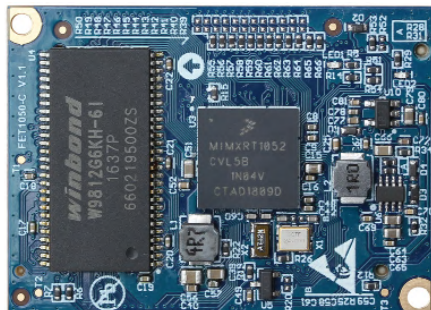
OK1052-C Carrier Board Features

Display	1xRGB888	USB OTG	1, USB2.0
Audio	1x Phone, 1x MIC	ADC	5(4* resistive touching, 1 resistor)
Ethernet	1, 10M/ 100M/ 1000M, RJ45 connector	PWM	1, backlight
UART	1x 3-lane serial	RTC	RX8010+CR1220
RS232	1x debug	SWD	1
CAN	1	Functional key	reset, waken up, boot key
IIC	1	DIP	1
SPI	1	LED	1
Camera	1 x DVP	Keypad port	1, 4*4 keypad
TF Card	1	EEPROM	1, 256 bytes
USB Host	1x USB 2.0	Power In	5V

◆ TARGET APPLICATION

UAV, HMI, PLC, motor control, motion control, robotic, smart lighting, solar converter, power system control, conditioner, concentrator.