

FCU2601 Embedded Computer

FCU2601 is powered by Rockchip’s industrial grade SoC RK3568J and it’s specially designed for EMS related applications with fanless passive cooling solution.

Highlights:

- 4×Cortex-A55@1.8GHz;
- Versatile, it can support 11x RS485, 4x Ethernet and 2x CAN;
- Supported protocols: Docker, MySQL, FTP Server, MQTT, ModBus-TCP, ModBus-RTU, OpenVPN, OpenSSL, OpenSSH;
- Power failure protection solution to enhance data security;
- Compliant with CE, FCCU, RoHS and EMC



4×Cortex-A55 ARM	1.8GHz Clock	CE/ FCC, RoHS Certificate
-40°C~+75°C Operating Temperature	11-ch RS485	4-ch Ethernet

Product features :

CPU	<p>Rockchip RK3568J</p> <p>CPU: 4×Cortex-A55@1.8GHz</p> <p>NPU: 1TOPS, supports INT8/INT16/FP16/BFP16 mix operation</p> <p>GPU: Mali-G52-2EE; OpenGL ES 1.1, 2.0, 3.2, Vulkan 1.0,1.1, OpenCL 2.0</p> <p>VPU:</p> <ul style="list-style-type: none"> •Hard Decoding: H.264, H.265, VP9: up to 4096x2304@60fps; VP8: up to 1920x1088@60fps; VC1, MPEG-4, MPEG-2, MPEG-1: up to 1920x1088@60fps; H.263: up to 720x576@60fps •Video Encoding: H.264/AVC, H.265/HEVC: up to 1920×1080@60fps
RAM	2GB/4GB DDR4
Flash	16GB/32GB eMMC
Voltage input	DC 24V(9V~36V)
Operating temp	-40°C~+75°C
Dimensions	190x140x45mm
Cooling solution	Passive cooling, fanless
Net Weight	1.32KGs(for the expanding version, 4G is not contained)

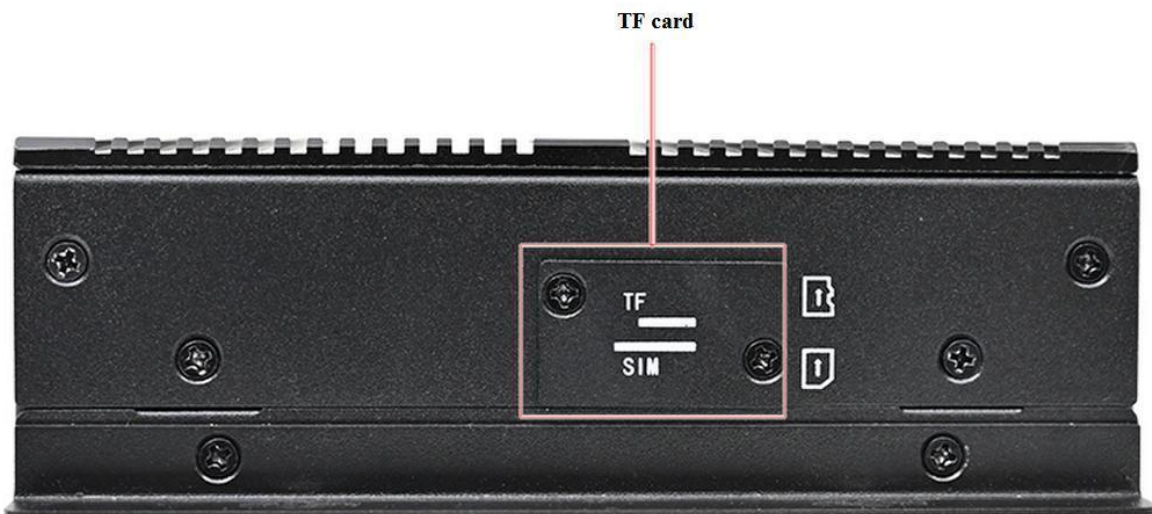
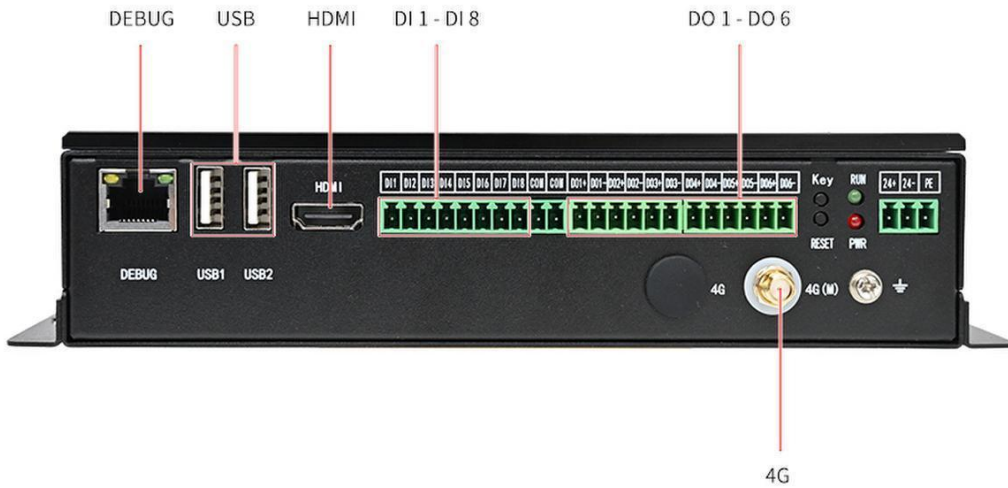
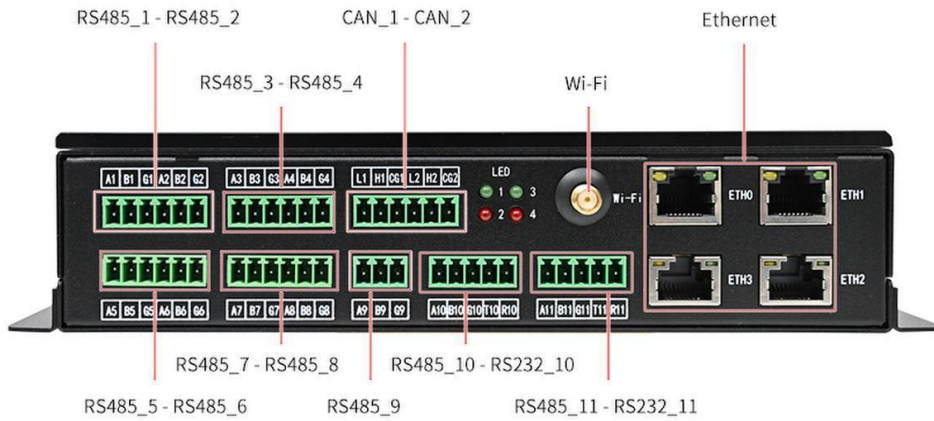
SoM specifications:

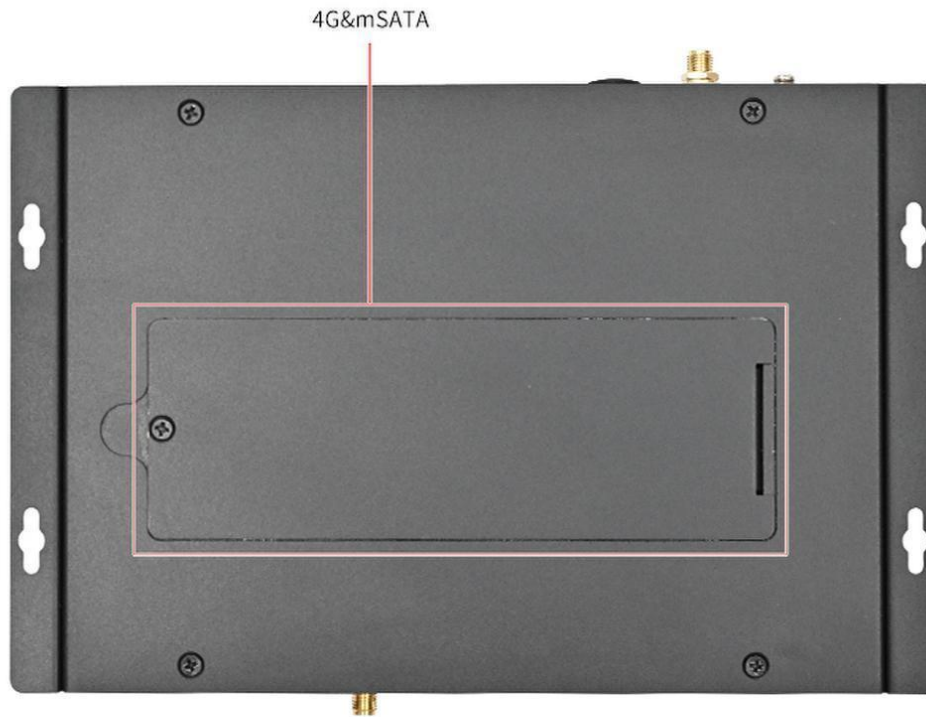
Peripheral	Primary	Advanced	Spec.
RS485	4	11	The primary option is with 4 RS485 and the advanced is with 11 RS485
RS232	0	2	2 RS232 for the advanced option are multiplexed with RS485
Ethernet	2	4	The primary is with dual Gigabit Ethernet ports, and the advanced option has two more fast Ethernet ports
CAN	2	2	CAN2.0B
DI	8	8	Dry contact
DO	6	6	Always on, 30VDC/ 3A
mSATA	1	1	Compliant with SATA3.0 protocol, for storage expanding
TF card	1	1	Supports storage expanding and OS image flashing
4G	1	1	EC200N, EC20, EC25, EG25, Mini PCIE slot
WiFi	1	1	Supported
HDMI	1	1	
USB	2	2	USB2.0 Host, can be used for TP, U-disk, mouse, key board, etc.
RTC	1	1	Timing accuracy 1 min/month
Buzzer	1	1	Supported
Super capacitor	1	1	Can maintain Ethernet, 4G or WiFi online for 5 seconds after power failure
Debug	1	1	RJ45 connector, RS232 level, Cisco

Exterior and dimensions:



Diagram:





Supported OS:

Supported OS	Linux4.19	Forlinx Desktop 20.04
	MySQL	MySQL
	FTP Server	FTP Server
	ModBus-TCP	ModBus-TCP
	ModBus-RTU	ModBus-RTU
	OpenVPN	OpenVPN
	MQTT	MQTT
	OpenSSL	OpenSSL
	OpenSSH	OpenSSH

Provided technical files

File list	User manual, mechanical drawing, OS image, utilities, application note

Ordering options:

PN	Option	Temp Width	RAM	Flash	Phase
FCU2601+3568J-C182GSE16GI	2GB, primary	-40°C~75°C	2GB	16GB eMMC	Small batch
FCU2601+3568J-C182GSE16GI	2GB, advanced	-40°C~75°C	2GB	16GB eMMC	Small batch
FCU2601+3568J-C184GSE32GI	4GB, primary	-40°C~75°C	4GB	16GB eMMC	Small batch
FCU2601+3568J-C184GSE32GI	4GB, advanced	-40°C~75°C	4GB	16GB eMMC	Small batch

Note: power adapter, 4G cellular and antenna are optional modules but not contained.