Preliminary Datasheet for HMI

Features

XMC070WV01AC-THL

The is equipped with a 32-bit dual-core high-efficiency, low-power processor

1. AI accelerate support & Equipped with Rich Set of I/O Peripherals
2. Mature Software Support with GUI Editor platform, developers can build applications anew or migrate their own applications
3. Various Embedded systems and Applications support

Specifications

CPU	**-One core at 240 MHz: 613.86 CoreMark; 2.56 CoreMark/MHz** **-Two cores at 240 MHz: 1181.60 CoreMark; 4.92 CoreMark/MHz**
Memory	384 KB ROM 512 KB SRAM 8 MB PSRAM 16M SPI_FLASH
WIFI	• IEEE 802.11b/g/n-compliant • Supports 20 MHz and 40 MHz bandwidth in 2.4 GHz band
Bluetooth	• Bluetooth LE: Bluetooth 5, Bluetooth mesh • High power mode (20 dBm) • Speed: 125 Kbps, 500 Kbps, 1 Mbps, 2 Mbps
USB	1 Group
GPIO/UART/IIC	40Pin (Pitch 2.54mm/2.0mm)
CANBUS	1 Group
RS485	1 Group
UART/RS232	1 Group
DISPLAY Input	TTL/RGB Mode
DISPLAY	7.0”800RGB*480 High Brightness
TOUCH TYPE	Capacitive Touch/Resistive touch

Applications

With low power consumption ,ESP32 is an ideal choice for IoT devices in the following areas Smart Home/IndustrialAutomation HealthCare Consumer/Electronics/Smart Agriculture/POS machines/Service robot/Audio Devices/GenericLow-power IoT Sensor Hubs GenericLow-power IoT Data Loggers Cameras for Video Streaming/Speech Recognition/ImageRecognition/SDIO Wi-Fi+Bluetooth Networking Card/TouchandProximitySensing

J1,J2: GPIO/IIC

PIN	ASSIGNMENT	PIN	ASSIGNMENT
1	5.0V	2	5.0V
3	3.3V_OUT	4	3.3V_OUT
5	GND	6	GND
7	GND	8	GND
9	NC	10	NC
11	EX_P0	12	EX_P1
13	EX_P2	14	EX_P3
15	EX_P4	16	EX_P5
17	EX_P6	18	EX_P7
19	NC	20	NC
21	NC	22	NC
23	ESP_20	24	ESP_19
25	ESP_41	26	ESP_40
27	ESP_04	28	ESP_42
29	ESP_01	30	ESP_02
31	IIC-SCL	32	IIC-SDA
33	GND	34	GND
35	GND	36	GND
37	3.3V_OUT	38	3.3V_OUT
39	5.0V	40	5.0V

J4A: UART,CANBUS

PIN	ASSIGNMENT
1	VCC
2	UART_RXD
3	UART_TXD
4	EN
5	BOOT
6	GND
7	CAN-
8	CAN+

J4B: UART,CANBUS

PIN	ASSIGNMENT
1	VCC
2	RS485A
3	RS485B
4	RS232_RXD
5	RS232_TXD
6	GND

J3: USB I/O

NO.	SYMBOL
1	+5.0V
2	DM
3	DP
4	GND