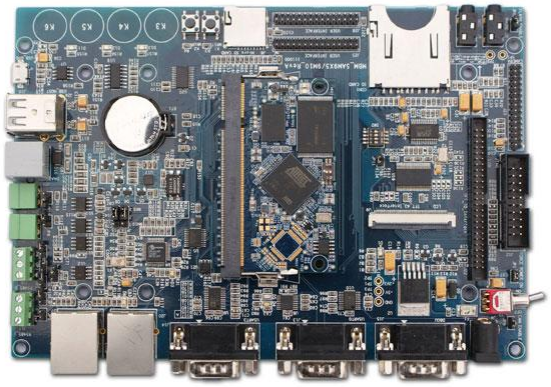
ATMEL MBS-SAM9G25 SBC Board

Order#: MBS-SAM9G25 Delivery Wt:1.5lb

ATMEL AT91SAM9G25 based MBS-SAM9G25 SBC board is the latest product produced by Embest. it is consisted of one base board (MBM-SAM-9G) and one processor card (MBC-SAM9G25),.this core board is the smallest 9X5 core on the market. It is so tiny that it can reduce much space of your products. You can use it easily to complete your project development and save much of your time to market . Using industrial connectors can realize seamless connection with base board, greatly improve the stability of the products.



MBS-SAM9G25 SBC board operates at up to 400MHz，with 256 Mbytes NandFash ,128MB DDR II,4MB serial DataFlash and 64KB serial EEPROM. It supports Linux 2.6.39 ,offer angstrom and android-2.3.5_r1 test .The board provides a wide range of peripherals, including a high-speed USB2.0 port(480MHz), an Ethernet 10/100M interface, audio interface, a JTAG debug port,Micro SD card interface,SD/MMC card interface, CMOS camera interface.It supports video data collection.

Core Board Features:

- Processor AT91SAM9G25
- Core Board Size:67mm*34mm
- 12MHz crystal oscillator
- 32.768MHz crystal oscillator
- 128MB DDR2 memory
- 256MB nandflash memory with chip selection control switch
- 4MB SPI Serial dataflash with chip selection control switch
- 64KB EEPROM
- 256B 1-wire EEPROM
- On-board power regulation
- Two user LEDs
- Optional PHY

Base board features

- The MBM-SAM-9G Base Board is a common main board to connect 9m10 core board & 9x5 core

board.

Base Board Size:181mm*165mm

Supply Voltage:5V DC

Supply Current:2A

Temperature Range:0~70℃

ONE WIRE EPPROM(1024-bit) ;

1×JTAG Interface ;

1×Camera Interface(9M10 and 9G25) ;

2×24 bit LCD Interface（Resistive Touch Panel） ;

1×DBGU Interface（3-wire） ;

2×UART Serial Port（1×5-wire、1×3-wire） ;

2×10/100Mb Ethernet Interface（core board and base board each have a PHY chip） ;

2×RS485 Interface ;

2×CAN Bus Interface ;

1×Smart DAA interface ;

2×USB 2.0 Host Interface ;

1×USB High-Speed USB2.0 OTG Interface ;

4×touch buttons（QTOUCH） ;

2×physical buttons（reset,wakeup） ;

1×Micro SD Interface ;

1×SD card Interface ;

3×user LED ;

1×Analog Output (connected to speaker by default)

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1×RTC Unit (without battery) ;

50 GPIO User Extension Interface

Software Features

NO.	**Example Programs**
1	adc_touchscreen
2	dma
3	getting-started
4	periph_protect
5	pmc_clock_switching
6	pwm

7	qtouch
8	smc_psram
9	spi_slave
10	ssc_dma_audio
11	sysc
12	tc_capture_waveform
13	twi_eeprom
14	twi_slave
15	usart_hw_handshaking
16	usart_serial
17	usart_spi
18	usart_synchronous
19	emac
20	hsmci_multimedia_card
21	hsmci_sdcard
22	hsmci_sdio
23	smc_nandflash
24	spi_serialflash
25	usb_audio_looprec
26	usb_cdc_serial
27	usb_core
28	usb_hid_keyboard
29	usb_hid_mouse
30	usb_hid_msd
31	usb_hid_tansfer
32	usb_iad_cdc_cdc
33	usb_iad_cdc_hid
34	usb_iad_cdc_msd
35	usb_masstorage
36	usb_video_isi

Linux software resources table

Type	function	Desciprion
Bootloader	AT91Bootstrap	Guide to Uboot
	Uboot	1.Support NandFlash to erase,read and write 2. Support net to download Image

		3.Support to set and keep environment variables 4.Support memory to appear , compare and modify 5. Support boot and bootargsto set
Kernel	Ethernet driver	ETH0
	Serial driver	USART0
		USART3
		DBGU
	USB	USB_HOST*2
		USB_OTG
	SD card driver	Micro SD
		SD Card
	Camera driver(ISI)	
	SMD driver	
	Zigbee driver	
	SPI driver	
	TWI driver	
	Qtouch key driver	
	DMA driver	
	GPIO driver	
File system	Angstrom file system	