BEGA220A
Display Embedded System



Features

- 400MHz 32 bit RISC architecture ARM926EJ CPU core
- 2GB NAND Flash / 64MB DDRII memory
- WINCE 5.0 OS
- LCD controller supporting RGB maximum 16M color at 24bpp
- On board 10 / 100Mbps high performance Ethernet with RJ45
- 1 x Host USB / 1 x Device USB
- 1 x isolated RS485 / 422
- 3 x RS232 / 1 x SPI
- Audio codec with dual channels amplifiers
- 6 x Channels ADC and one 4-wired touch panel
- 12 programmable IO
- 9V~28V DC requirement

Hardware Specifications

Processor
- 16 / 32 bit RISC architecture ARM926EJ RISC CPU core
- 64-way associative cache with I-cache (16KB) and D-cache(16KB)
- 400MHz CPU clock

OS Memory
- WINCE 5.0 with 2GB NAND Flash memory

System Memory
- 512K Byte SRAM
- 16 bit 64MB 133MHz DDRII memory

SD/MMC Card Socket
- Support SD / MMC host interface
- Compatible with SD memory protocol and SD media card protocol

Serial Port
- Support 2 x 3-wired DMA-based operation UART
- 1 x RS485 / 422 isolated communication port
- 1 x high speed SPI interface

USB Ports
- Support 1 x USB host compatible with USB 1.1
- Support 1 x USB device compatible USB 2.0

Audio Codec
- Support DSP based processing stereo codec with SNR 102dB DAC / differential microphone input
- Software programmable volume control and mute control
- Dual channels 2 watts speaker output

GPIO
- Support 12 x interrupted based IO sharing with Key board interface

ADC(option)
- Support 6 x channel 12-bit high speed A / D converter

Key Pads Interface(option)
- Support 12 Interrupted based IO

Touch Panel Interface
- Support 4-wired resistive type touch panel interface

Display
- Support 16M color TFT at 24bpp mode with resolution 800 x 480
- LED backlight supported

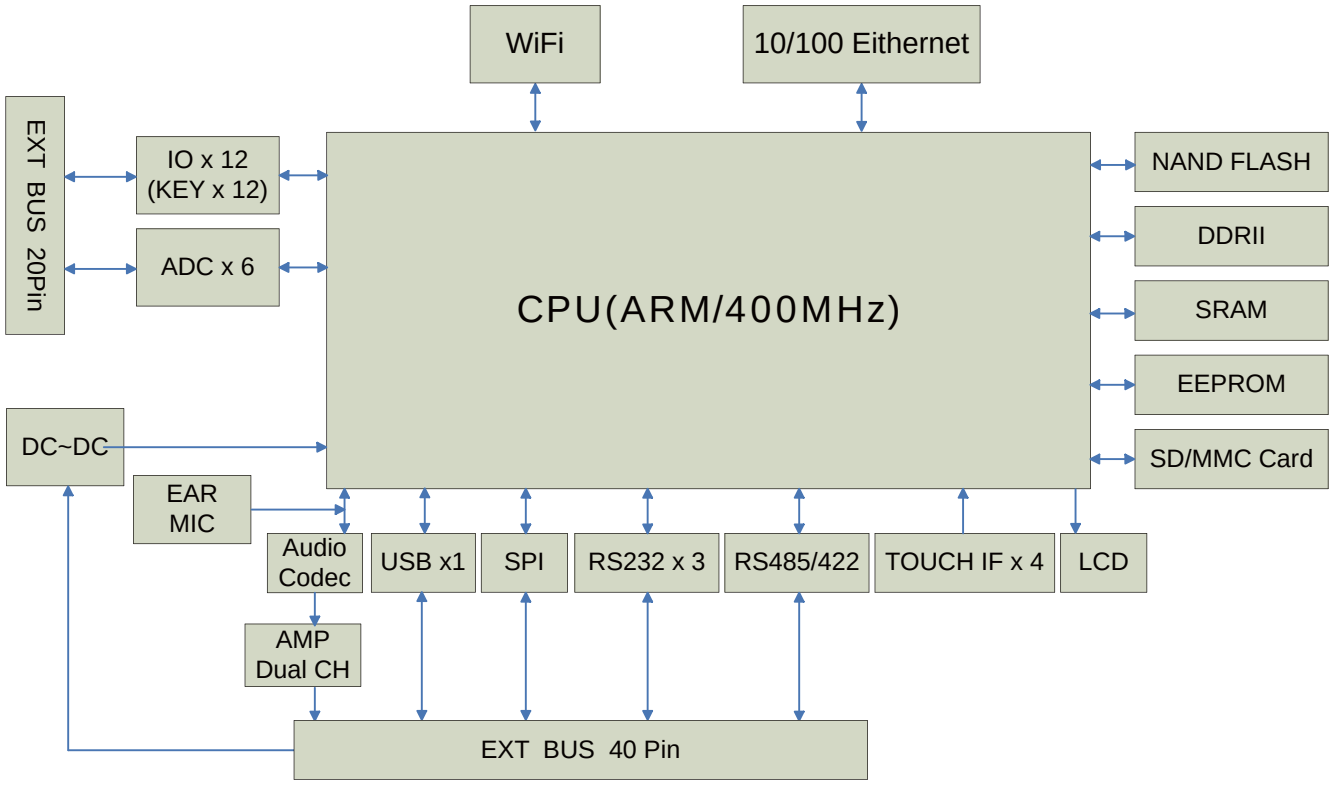
Ethernet Controller
- High performance 16-bit 10 / 100 Ethernet controller fully compliant with IEEE 802.3 / 802.3u standards
- RJ45 connector with active and link LED indicators

WLAN Module(option)
- Support WLAN module compliant with IEEE 802.11b/g
- Operating on 2.4GHz ISM radio band
- Wi-Fi compliant

Power Requirement
- DC9V~28V power requirement with short circuit protection

Operating Temperature
- TFT -20°C ~ 70°C T/P -20°C ~ 60°C

BEGA220A BLOCK DIAGRAM



Order Information

Parts NO.	WLAN	20Pin EXT Bus(IOx12,ADCx6)
BEGA220A		
BEGA220A1	☆	
BEGA220A2		☆
BEGA220A3	☆	☆