BETA903A

Mobile Data Terminal



Features

- 400MHz 32bit RISC architecture ARM926EJ CPU core
- 2GB NAND Flash / 64 MB DDRII / 512KB SRAM
- WINCE5.0 OS
- 8 interruptible key pad
- 4 x IO / 1 x Host USB / Device USB / 3 x RS232
- On board GSM / GPS module
- 7” TFT 16:9 display with 800 x 480 resolution
- DSP based audio codec via IIS-bus interface
- Built-in 2W amplifier / earphone
- Support SD / HS-MMC card
- 4-wired touch panel interface(option)
- 9V~28V DC requirement
- Backup charger circuit inside
- With car holder

Hardware Specifications

Processor
- 32 bit RISC architecture ARM926EJ 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
- 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

External Setting Connector
- Support JTAG for debug and USB (device) for system setting

Serial Ports
- Support 2 x 3-wired DMA-based operation UART
- One UART fully compatible 16C550

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

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 4 photo-couple input and 4 photo-couple output

Key Pads
- Support 8 interrupted based capacitive touch sensor keys with LED backlight

Display
- Support 16M color TFT at 18bpp mode with resolution 800 x 480 or equvalence
- LED backlight supported

GSM Module
- Siemens Tri-Band wireless module supporting 900/1800/1900MHz default(or 850 / 1800 / 1900MHz)
- Support Voice / SMS / CS Data / GPRS mode
- Built-in TCP / IP stack speed design of M2M application
- Support passive antenna

GPS Module
- Support GPS module with 16 channels ANTARIS 4 receiver engine (or 50 channels receiver engine) with passive antenna
- Support GGA / RMC / TXT / GLL / GSA / GSV / VTG message Sensitivity of tracking -158dBm ~ -160dBm
- Support active antenna

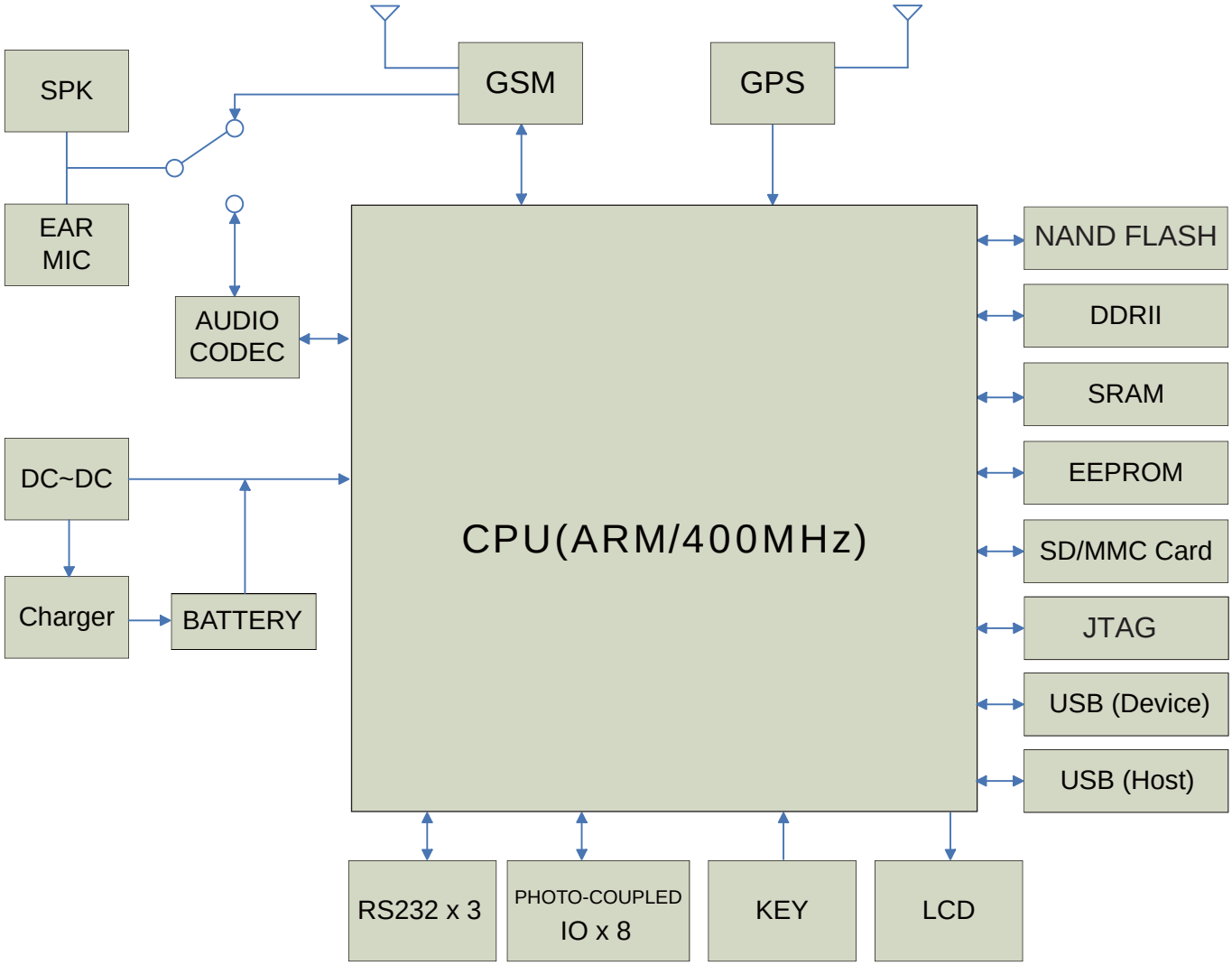
Chassis
- Provide ABS 94V0 chassis with 2 x serial ports , 1 x 8 isolated IO, 2 x USB device , 1 x USB host , 1 x DC Power port and 1 x Power switch
- Built-in metal or equivalence for EMC / EMI

Power Requirement
- DC9V~DC28V power requirement with short-circuit protection

Battery Power (option Top: TFT -20°C - 70°C)
- Support 2200/4400mAh polymer battery with low voltage and thermal protection
- Support constant voltage regulation / constant current charging and auto-termination charger

Operating Temperature
- Industrial: TFT -20°C ~ 85°C T/P -20°C ~ 60°C
  Car: TFT -30°C ~ 80°C T/P -30°C ~ 80°C

BETA903A BLOCK DIAGRAM



Order Information

Parts NO.	Touch Panel	Battery	LCD	Touch Panel
BETA903A			-30°C ~ 80°C	
BETA903A1	☆		-30°C ~ 80°C	-30°C ~ 80°C
BETA903A2		☆	-30°C ~ 80°C	
BETA903A3	☆	☆	-30°C ~ 80°C	-30°C ~ 80°C
BETA903A4			-20°C ~ 70°C	
BETA903A5	☆		-20°C ~ 70°C	-20°C ~ 60°C
BETA903A6		☆	-20°C ~ 70°C	
BETA903A7	☆	☆	-20°C ~ 70°C	-20°C ~ 60°C