

# TASHI

# Multi- Function Versatile Controller



## Multi-Functional Controller for various applications

MT680 is a rugged and versatile Multi-function controller/terminal based on embedded WinCE .NET 5.0, equipped with large VGA touch display, video camera, speaker, microphone, Mifare RFID reader, digital I/Os, total IP based connections, which targets the home automation, video surveillance, telephony Intercom, information kiosk. It can be derived to many applications:

- Enterprise Time Management.
- Job costing
- Security control and monitor
- Health care
- Campus/School
- Financial, Banking
- Entertainment, such as Gambling / Gaming / Slot / Amusement
- Membership loyalty
- Transportation (Information Access & Transmission)
- Hospitality
- Mini- Kiosk
- Retail
- e-Service (POS System, Hosting, POI, V2oIP)
- MES- Shop Floor application

## Main Features

- WinCE 5.0 based operation
- SDK with DLLs to support for Video streaming, V2oIP, Zigbee control
- Big touch screen with 8" color TFT-LCD and VGA(640x480) resolutions
- Built-in 13.56MHz MiFare
- Wired communication support USB(Host/Client), Ethernet (PoE) and serial ports (RS232/RS485)
- Wireless communication support 802.15 Zigbee and optional 802.11b/g
- CMOS camera with 2 M Pixels resolution
- Speaker Audio output and Microphone audio input
- V2oIP with MPEG4 format
- One CF slot for 802.11b/g WLAN or GPRS WWAN
- One SD slot
- Power-over-Ethernet
- 4 Relay outputs, 4 photo-coupler inputs
- Watch dog function



# MT680

## Specifications



### Performance Characteristics

- OS WinCE 5.0
- CPU Intel Bulverde PXA 270CE 520 MHz
- FlashROM 64MB
- SDRAM 128MB
- Keyboard 6 hard keys
- Display 8" color TFT-LCD VGA(640x480) with Touch screen function

### Power Management

- Power input DC 12V/2A
- Mini UPS One rechargeable Lithium-ion battery with @ 7.4V, 1950mAH for 2 hours operation and one day backup (Elfin models will be without UPS)

### Communication I/O

- RS485/RS232 One RJ45 support, RS485+, RS485- / TXD, RXD, CTS, RTS
- Ethernet One RJ45 with PoE (Compliant IEEE 802.3af)
- CF One for WLAN or WWAN
- USB v1.1 Client/Host
- Relay Four relays (2A 30 Vdc, 0.5A 250 Vac)
- Digital input Four photo-couplers (3.3V ~ 12V)

### Audio/Video

- CCD Camera Micron CMOS 2 M pixels resolution
- Speaker 4 watts stereo speaker
- Microphone Omni Direction, -42dB sensitivity, 60d S/N rate

### Expansion

- CF Type II slot (Not available when installing with WLAN or WWAN)
- SD For storage

### RFID Reader

- MiFare (13.56 MHz, ISO 14443A only or ISO 14443A/B & ISO 15693; Read/Write)

### Outline and Appearance

- Dimension: 295mm (L)\*43mm (W)\*203mm(H)
- Weight: 1365.7g

### Programming SDK

- Video Streaming
  - Monitor real-time video from MT680 and IP CAM
  - Store Video (from MT680 and IP CAM ) to NAS
  - Play recorded Video
  - Follow RTSP, RTP/RTCP protocol
  - Audio/Video Codec: G.711/AMR and MPEG4
- VoIP/V2oIP
  - Support P2P and SIP Proxy
  - Follow RFC3261 SIP protocol
  - Follow RTP/RTCP, RFC1889/1890 protocol
  - Audio/Video Codec G.711, A/u law, MPEG4
- Zigbee
  - Follow 802.15.4 Zigbee stack
  - Follow Zigbee Alliance "Home Control Profile"
  - Presence server to log/control all device on single terminal
  - Remote control/monitor by Web or MSN
- WinCE based I/O drivers, DLLs.
- Languages supported: C#, VB.NET, C++

### Physical and Environment

- Temperature Operation 23°F~ 113°F(-5°C~45°C)
- Temperature Storage -4°F~140°F(-20°C~60°C)
- Humidity 5% to 95% RH non-condensing
- Two hours operation and one day backup

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