

# StationMaster™ Series

## MT80PCI 8-channel station interface board data sheet

### TELEPHONY APPLICATIONS

- PC-based PBX
- Call Center/Help Desk
- Inbound and Outbound Telemarketing
- Communications servers
- Operator Services
- Automatic Call Distribution (ACD)
- Teleconferencing
- Audiotex

### FEATURES AND BENEFITS

- 8 Analog POTS station lines
- 8 Voice/Tone resources - one per for each station port
- All stations use common API
- On-board ring generation
- On-board talk battery
- Caller ID transmit/receive
- On-board conferencing, trunk-to-trunk, trunk-to-station, station-to-station switching capabilities
- MVIP expansion bus
- 4x RJ-14 Telco connector
- Plug-and-Play™ support
- ADSI FSK Transmit capability (available on Release 2)

### SOFTWARE SUPPORT

- **Available APIs**
  - Microsoft TAPI™ V2.1
  - Microsoft TAPI™ V3.0 (Q1'00)
  - WIN NT Native™, C/C++
  - Active-X™
- **Operating Systems**
  - Windows NT™ V4.0
  - Windows 98™
  - Windows NT™ Embedded
  - Windows 2000™ (Q1'00)
  - LINUX (Q1'00)
- **Software Utilities**
  - DSPView™
  - Profiler™
  - DiagPCI™

The MUSIC Telecom StationMaster™ Series **MT80PCI** telephone station interface board is a feature-rich 8-channel, half-size PCI slot, hardware platform designed to support demanding, high-volume PC-PBX telephone switching and call center telephony applications. On-board talk battery voltage and built-in ring generation, along with industry-standard MVIP switching, make the single-board MT80PCI solution an ideal platform for applications developers who demand exceptional performance at very affordable prices. The MT80PCI scales from 8 channels up to 128 supported station interfaces per system, and is 100% compatible for use with all MUSIC Telecom Passport-PCI™ Series trunk-side voice processing board products.

The MT80PCI uses a unique quad-digital signal processing (DSP) architecture running state-of-the-art algorithms. All 8 channels have their own DSP resource, delivering world-class DTMF call progress, tone detection and audio compression, in addition to station-side functionality. Supported audio encoding includes OKI ADPCM, A-law/ $\mu$ -law, WAV, and GSM compression that offers a 13.3 kb per second storage rate. A built-in, extra audio jack (9<sup>th</sup> channel) allows activation of the audio channel for headset record/playback. Seamless integration to third-party digital PBX and T1/E1/ISDN voice trunk interfaces, text-to-speech, speech recognition and fax hardware resources is achieved using the on-board MVIP switch.

Application development is facilitated by the fact that all channels use a common API approach. Comprehensive MUSIC Telecom library development toolkits exist to support Microsoft TAPI, ActiveX, and Windows NT Native, C/C++. All Microsoft Windows operating systems are fully supported. Powerful developer/installer enablers include: DSPView - a manual test tool utility; Profiler - an automatic call progress setup utility; and DiagPCI - a diagnostic tool.

The state-of-the-art MT80PCI design takes full advantage of MUSIC Telecom's new Modular Interface Technology™, delivering higher performance per station channel, easier configuration/installation, and overall lower cost of ownership.



MT80PCI



DEFINING NETWORK TELEPHONY INTEGRATION (NTI™)

**TECHNICAL SPECIFICATIONS**

**General**

- Minimum system: IBM Pentium or greater
- Host interface: PCI 2.1
- Form factor: PCI half-size
- Host interface speed: 33 MHz, 32 bit target
- Number ports: 8
- Max. boards/system: 16 (128 stations)
- Digital signal processor: 2x Texas Instruments TMS320C50 40 Mhz
- Connector(s): 4x RJ-14

**Conferencing**

- Group sizes: 2 to 8 ports
- Maximum groups: 8 (3 party maximum)

**Station Interface**

- Interface type: Two-wire loop start, balanced battery feed
- Loop current: 25mA +2mA
- Open loop voltage: -21 VDC +/-2 VDC
- Closed loop current: Current limited to -30mA max.
- Loop length: 2500 feet, typical (24 gauge)
- Impedance: 600 Ohms ±5%
- Echo return loss: Greater 24.0dB (2-wire)
- Signal/noise ratio: 35dB +/-3dB (15 dBm, 1004Hz reference)
- Idle channel noise: Less then 20 dBnc
- Cross talk coupling: Less then -70dB max. (0 dBm, 1004Hz)
- Freq. response: 300Hz to 3400Hz ±3dB (transmit and receive)
- Ring voltage: 65 Vrms typical
- Ring frequency: Software selectable
- Ring equivalency: 1 REN per line, all lines ringing simultaneously
- ADSI generation: FSK generation per Telcorda TR-NWT-000030

**Power Requirements**

- +5 VDC 3.5 A max. (All stations off-hook)
- +12 VDC 150 mA max.
- -12 VDC 150 mA max.
- Operating temperature: 0°C to +50°C
- Storage temperature: -20°C to +70°C
- Humidity: 8% to 80% noncondensing

**Warranty**

- 3 years standard

**CERTIFICATIONS**

- FCC Part 15 class A (pending) - USA
- CSA (pending) - Canada
- CE (pending) - Europe

**ORDERING INFORMATION**

Model	Stations	Software Options			
		Caller ID	Call Logging	Conferencing	GSM
MT80PCI	8	✓	✓	✓	✓

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