

StationMaster™ Series

MT2x6PCI

PC-PBX switching 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

FEATURES AND BENEFITS

- 2 Analog POTS trunk (CO) lines
- 6 Analog POTS station lines
- 8 Voice/Tone resources - one per for each port (trunks and stations)
- Stations and trunks both use common API
- On-board ring generation
- 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 connectors
- On-board battery voltage supply
- 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 **MT2x6PCI** PC-PBX telephony board is a feature-rich, PCI-based analog interface hardware platform, delivering a comprehensive 2-trunk x 6-station PBX telephone switch in a half-size slot, Plug-and-Play™ supported solution. The MT2x6PCI is a cost-affordable, scalable product built to run mission-critical office applications such as a PC-based PBX switching system for a small business, or a departmental Call Center communication server for an enterprise account.

All 8 ports on the MT2x6PCI have a dedicated digital signal processing (DSP) voice resource running state-of-the-art algorithms that deliver world-class call progressing, tone processing, and audio compression. Supported audio encoding includes OKI ADPCM, A-law/ μ -law, WAV, and GSM compression that offers as low as a 13.3 Kb per second storage rate. All trunk or station ports use a common API, simplifying development. Each MT2x6PCI board is equipped with a built-in extra audio jack and included adapter cable to support headset record/playback, uploading/downloading of voice prompts, or music-on-hold input. Industry-standard MVIP switching is built-in. Software options include North American & International Caller ID, on-board Conferencing, and OEMkey™ registration. The 6 station/extension interfaces deliver built-in ringing and talk battery generation on the same board.



MT2x6PCI

MT2x6PCI application development is facilitated using comprehensive MUSIC Telecom library development toolkits supporting Microsoft TAPI, ActiveX, and Windows NT Native, C/C++. All Microsoft Windows operating systems are 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 MT2x6PCI is scalable (up to 32 x 96) and uses MUSIC Telecom's brand-new Modular Interface Technology™, delivering enhanced voice/station switching performance, enhanced configuration/installation, and low cost of ownership.



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: 33MHz, 32 bit target
- Number voice ports: 2
- Number station ports: 6
- Max. boards/system: 16 (32x96)
- Digital signal processor: 4x Texas Instruments TMS320C50 40 Mhz
- Connector(s): 4x RJ-14 female

Conferencing

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

Trunk Interface

- Interface type: Two-wire loop start, terminate
- Loop current range: 20 to 55mA, Current limited
- Impedance: 600 Ohms +/- 5% (off-hook)
Greater than 10K Ohms (on-hook)
- Echo return loss: Greater than 20 dBm (2-wire)
- Signal/noise ratio: 35dB referenced to -15dBm (-15dBm, 1004Hz reference)
- Idle channel noise: Less than 20 dBrc
- Cross talk coupling: Less than -70dB (0 dBm, 1004Hz)
- Freq. response: 350Hz to 3400Hz ±3dB (transmit and receive)
- Ring detection: 30Vrms min, 13 to 68Hz

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 than 20 dBrc
- Cross talk coupling: Less than -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 Telcordia 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
- FCC Part 68, trunk interfaces only (pending) - USA
- CSA (pending) - Canada
- CTR-21 (pending) - Europe

ORDERING INFORMATION

Model	Ports	Software Options		
		Caller ID	Conferencing	GSM
MT2x6PCI	2 trunk and 6 station	✓	✓	✓

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