# TV-2604 4-port VoIP/FoIP Board

TV-2604 are PCI bus VoIP/FoIP boards that provide 4-channel VoIP and FoIP functions, supporting various low bit-rate voice compression with silence suppression and echo cancellation, and T.38 compliant fax over IP with up to 14400 bps fax transmission. SCSA bus digital switching is equipped onboard to connect trunk /extension lines. Each port of TV-2604 can be used for receiving or dialing. The maximum number of TV-2604 that can be installed in a single system depends on the PCI bus the system has and the system performance.

#### **Drivers /API**

- Drivers for Windows NT<sup>®</sup>/ 2000
- DLL type driver supports almost all kinds of programming languages
- API for C, VB, Visual C++, Borland C++, Delphi, Visual Foxpro are available

## **FEATURES & BENEFITS**

- Each TV-2604 supports 4-channel independent VoIP/FoIP interface
- Standard compliant low bit-rate (G.723.1, G.729A or G.711) voice compression
- Allows for 1 set of 16-way conference
- Built-in 7 tone plants include two ringback tone, busy tone, warning tone, two dial tone and music on hold
- Silence suppression, voice activity detection (VAD), and comfort noise generation (CNG)
- Standard compliant fax over IP (T.38) with up to 14400 bps fax transmission
- Provides any to any (any-port can connect to any-other port), non-blocking switching between ports
- Dedicated processor to ensure background operation
- DTMF dialing; Digit duration and Pause time selection
- Detect caller hang up signal whether or not the system is playing or recording message
- Real time digitizing and decompression during recording and playback
- Call Progress detection of busy, dial, or ringback tone
- DTMF detection during playback or recording
- SCSA bus digital switching

## **TECHNICAL SPECIFICATIONS**

#### Host Interface:

- Bus: PCI 32 bit bus
- Shared Memory: 128K byte SRAM on each TV-2604
- Interrupt: INTA

#### **VoIP Interface:**

- Speech Digitizing Algorithm: G.729A (8Kbps), G.723.1 (6.3Kbps & 5.3Kbps), G.711 (64Kbps)
- VAD/CNG: G.729B for G.729A, G.723.1A for G.723.1
- ▶ G.165/168 line echo cancellers
- Protocol: SIP or H.323
  - H.323: H.323V4, H.225, H.245
  - SIP: RFC-3261, RFC-2327, RFC-2833, RFC-3264
  - DTMF dialing, Digit duration and Pause time selection
- DTMF receiving, supports SIP/H.323 out-band DTMF delivery

#### FoIP (Fax over IP) Interface:

> ITU-T T.38 Fax relay

#### **Fax Interface:**

- Up to 14400 bps
- ITU-T T.30 protocol
- ITU-T V.21, V.27ter, V.29, V.33, and V.17

#### Switching bus

 SCSA bus: One 26-pin connector to standard SCSA bus

## APPLICATIONS

- VoIP Gateway
- IP PBX