



CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU Fax Boards

The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU boards are single-slot, high-density fax resource boards that support a span of either 24 or 30 ports of feature-rich fax capabilities. These boards make it easy for developers to add fax technology to their existing computer telephony (CT) and media server applications. These products are a key component of large-scale, computer-based fax and unified messaging applications for the enterprise (for example, fax and unified messaging servers).



High-Capacity Enterprise Fax Boards

The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU boards give fax-intensive applications robust processing power and flexibility. Users can take advantage of a span of 24 or 30 ports of feature-rich fax capabilities on a single board, deploying fewer boards per chassis and, ultimately, fewer and smaller chassis overall. This lowers the cost of ownership and enables more end users to deploy computer telephony (CT) applications. Up to 4 CPI/2400-1T1-PCIU or 3 CPI/3000-1E1-PCIU boards (up to 96 or 90 ports of fax) can be combined in a single chassis.

Features and Benefits

High density — The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU boards provide 24 or 30 send and receive intelligent fax ports in a single slot. This high density lowers per-slot costs and, by extension, overall system costs.

Short transmission time — Fast 14.4 KB/s fax transmission, both sending and receiving, concurrently on all channels, helps shorten transmission time and save on phone costs.

Worldwide compatibility — Compatibility with T.30 protocol and modifications helps ensure high compatibility with fax devices worldwide. T-1 and E-1 ISDN, plus T-1 CAS protocol support, also provide freedom to build solutions for the global marketplace.

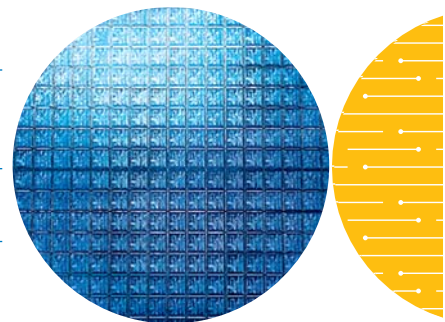
Fast throughput — On-board and on-the-fly MH, MR, and MMR compression mean fast throughput, maximizing the number of pages a user can fax per minute and minimizing the amount of time spent on the phone.

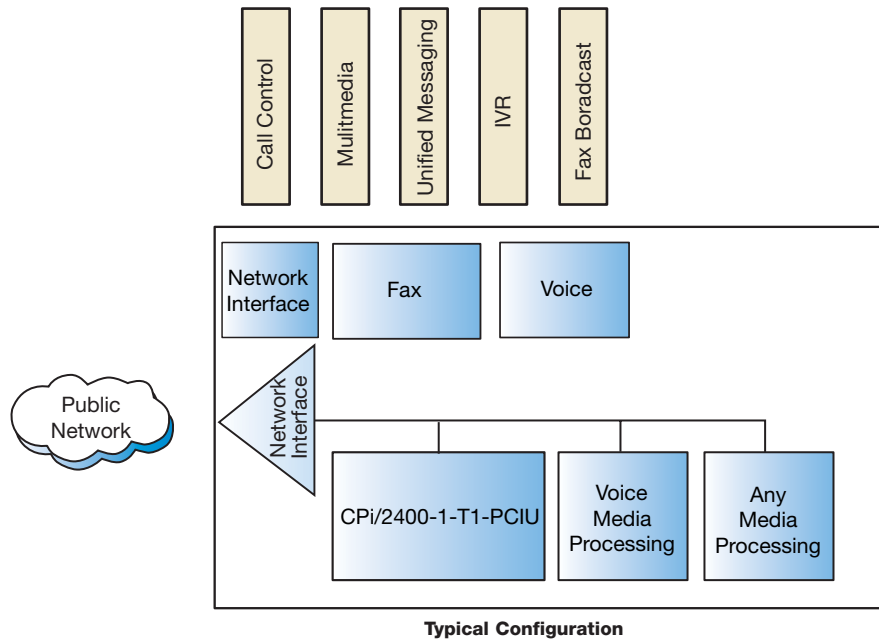
Easy migration — The legacy GammaLink GDK API enables applications that support low-density CP series fax boards to benefit from highly-integrated, newer-generation CP series boards for a minimal development cost.

Operating system choice — These high-density fax boards support the Microsoft Windows NT, Windows 2000, and Windows XP operating systems.

Upgradable — These digital signal processor (DSP)-based boards provide maximum flexibility and future firmware upgradability.

Intel in
Communications





The CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU boards offer a rich set of full fax features and support state-of-the-art digital signal processing (DSP) technology and industry-standard Universal PCI and CT Bus technologies. Combined with other boards such as network interfaces and media processing boards, the CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU boards are positioned to fulfill the needs and demands of the fax server and unified messaging market segments.

Configurations

Use the CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU to add fax processing to your systems using network interfaces and media (e.g., voice) processing boards. Build sophisticated, converged communications systems to which you can easily add capabilities like fax on demand, fax broadcast, and unified messaging services.

The CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU boards share a common hardware and firmware architecture with the other CT Bus boards for maximum flexibility and scalability. You can add features and grow your systems while protecting your investment in hardware and application code. With only minimum modifications, applications can be easily ported to lower- or higher-line-density platforms. The CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU boards install in any Universal PCI-based personal computer or server and compatible computers (PC platforms based on the Intel® Pentium® processor). The CPi/2400-1T1-PCIU and CPi/3000-1E1-PCIU boards provide everything required for adding high-density fax solutions to your media servers. The maximum number of lines that can be supported depends on the application, the amount of disk I/O required, the host computer CPU, and the power supply.

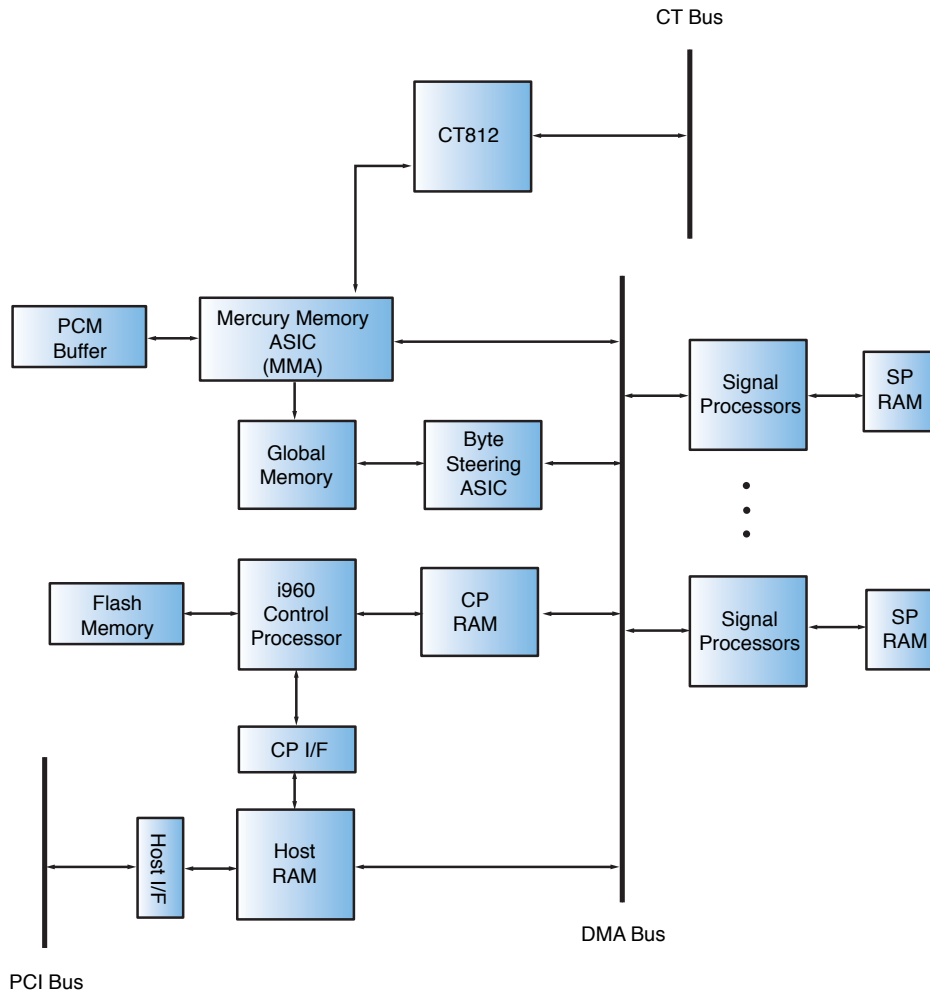
Applications

Fax broadcast — A fax broadcast system, which sends out numerous fax messages such as press releases in one easy operation, is an efficient way to save money on communications costs.

Unified messaging — With high densities that allow for maximum lines in a minimal footprint, these fax boards are the ideal choice for adding fax capabilities to open, modular, unified messaging solutions.

Fax server — Using these high-density fax boards in a fax server application makes it simple and affordable to add fax to the communications infrastructure.

Fax on demand — It's easy to reach out to customers by giving them easy telephone access to faxed information with no operator involvement. This is an ideal way to stretch a company's communications budget.



Functional Diagram

The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU boards can operate within a mixed chassis containing PCIU products from Intel. The boards' forward-looking design incorporates the H.100 connector to simplify connection to next-generation CT Bus products. They can also connect to existing SCbus products through the use of an optional CT Bus/SCbus adapter. The adapter provides both SCbus and H.100 physical connectors required to link the CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU boards to existing SCbus products.

Software Support

The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU fax boards support the Microsoft Windows NT, Windows 2000, and Windows XP operating systems.

The CPI/2400-1T1-PCIU and CPI/3000-1E1-PCIU fax boards include the legacy GammaLink API, which helps to ensure a clear migration path and seamless

integration into existing applications, protecting the developer's investment in code.

As an alternative, developers can choose the DM/F240-PCIU and DM/F300-PCIU fax boards, which can be programmed through the R4 API.

Functional Description

The CPI/2400-PCIU and CPI/3000-PCIU boards combine 24 or 30 resources of 14,400 b/s (v.17) facsimile that can perform all standard functions of a fax machine and more, including sending and receiving multiple documents, polling, broadcasting, and turnaround polling. The boards use a dual-processor architecture that combines the signal processing capabilities of a DSP with the decision-making and data movement functionality of a general-purpose control microprocessor. The boards provide resource sharing for digital signaling and digital voice information input via the CT Bus.

Technical Specifications**

Hardware

Form factor	Universal PCI (5VDC or 3.3 VDC)
Size	Full size
Power requirements	+5 VDC/19 Watts +12 VDC/N/A -12 VDC/N/A +3.3 VDC/N/A
Cooling	50°C 2.3 CFM per board 40°C 1.5 CFM per board 30°C 1.1 CFM per board
Operating temperature	0°C to +50°C
Storage temperature	-20°C to +70°C
Humidity	8 to 80% non-condensing

Software

Operating systems	Windows NT 4.0 Windows 2000 Windows XP
API	GDK

Fax Features

ITU	T.30, T.4, T.6 V.17, V.29, V.27ter, V.21
Speed	14.4 Kbps with automatic fallback, send and receive, concurrently on all channels
TIFF	Single page, multi-page
Compression	MH (ITU T.4, 1D) MR (ITU T.4 2D) MMR (ITU T.6)
ASCII to TIFF	On-board and on-the-fly
Page headers	Generated on-board and on-the-fly
ECM	Supported
Widths	A4, A3, B4
Resolution	Standard (100 x 200) Fine (200 x 200)

Network

Type	T-1 (CPI24001T1PCIU) E-1 (CPI30001E1PCIU)
Connectors	RJ-48C

Network Protocols

T-1 CAS	E&M Loop start Ground start
T-1 ISDN	DMS100 AT&T 4ESS AT&T 5ESS INS1500
E-1 ISDN	Euro-ISDN

Safety and EMC Certifications

FCC	Approved
C-UL	Approved
UL	Approved
CE	Approved

System Requirements

SR 5.1.1 call-out min. for DM3	200MHZ with 128M (2 or fewer boards) 512M (3 or more boards)
Operating system	Windows NT 4.0, Windows 2000, Windows XP

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