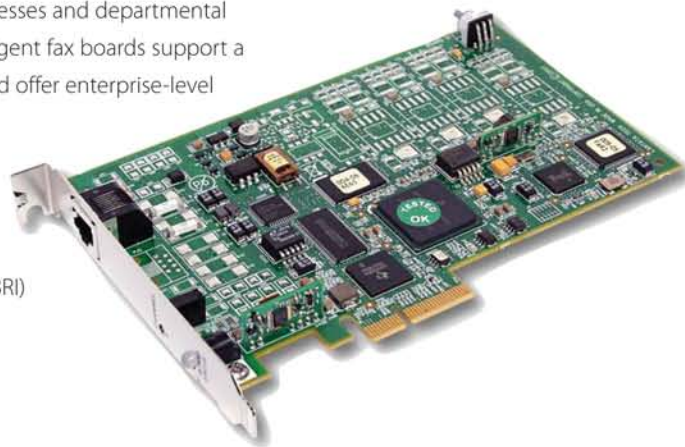


# Dialogic® Brooktrout® TruFax® Fax Boards

The Dialogic® Brooktrout® TruFax® Fax Boards offer small businesses and departmental workgroups dependable network fax capabilities. These intelligent fax boards support a variety of applications, such as fax server and workflow fax, and offer enterprise-level quality and performance to small businesses.

## Products Discussed in This Datasheet

- Dialogic® Brooktrout® TruFax® 100 Fax Board (Analog)
- Dialogic® Brooktrout® TruFax® 200 Fax Board (Analog and BRI)
- Dialogic® Brooktrout® TruFax® 250 Fax Board (BRI)
- Dialogic® Brooktrout® TruFax® 400 Fax Board (BRI)
- Dialogic® Brooktrout® TruFax® 450 Fax Board (BRI)



Dialogic delivers time-tested, industry-leading fax technology, offering a broad range of fax and fax over IP products, which are supported by more than 50 software partners and approved for use in more than 40 countries (as of 2008).

Features	Benefits
<b>Dialogic® Brooktrout® Adaptive Call Progress provides a built-in library of communications algorithms for the identification of and adaptation to various fax machines and line conditions</b>	Provides compatibility, high rates of connectivity, and high transmission speeds across a wide range of fax machines and telephone line conditions
<b>Purpose-built</b>	Leverages advanced fax algorithms and dedicated fax-processing power, offering performance and reliability benefits in comparison to Class 1 and Class 2 fax modems and multipurpose telephony adapters
<b>Fax-only modulation</b>	Drops all non-T.30 packets, eliminating possible security issues related to non-T.30 packets
<b>Error Correction Mode (ECM) – TruFax 250 and TruFax 450 models only</b>	Allows high first-attempt transmission rates
<b>Modified Modified Read (MMR) compression algorithm – TruFax 250 and TruFax 450 models only</b>	Can reduce transmission time from 200% to 300%
<b>Onboard fax protocol processing</b>	Can lower a fax server's CPU utilization and improve overall system performance
<b>Plug and play</b>	Easy installation and configuration

Available in several configurations, Brooktrout TruFax Fax Boards provide up to four channels per board for dedicated send-and-receive-channel configurations. One-channel analog and two-channel BRI configurations are suitable for customers who have occasional faxing needs, but still require a very reliable fax solution. The two-channel analog and four-channel BRI configurations are generally used in network fax solutions. If Brooktrout TruFax Fax Boards are configured to send and receive faxes through separate channels, the fax solution can receive faxes in one channel and send faxes from the outbound job queue in another channel.

Table 1 lists the Brooktrout TruFax Fax Board models and some of their features. The ISDN telephony interface can be used in Europe and Japan.

Models	Channels	Interface	Microsoft® Shared Fax	Adaptive Call Progress	ECM	MMR
TruFax 100	1	Analog	•	•		
TruFax 200	2	Analog	•	•		
Trufax 200 BRI	2	BRI ISDN		• •	•	•
TruFax 250 BRI	2	BRI ISDN		• •	•	•
TruFax 400 BRI	4	BRI ISDN				
TruFax 450 BRI	4	BRI ISDN				

Table 1. Dialogic Brooktrout TruFax: Models and Features

## Technical Specifications

### Hardware

**Note: Dialogic® Brooktrout® TruFax Fax Boards are not compatible with Dialogic® Brooktrout® TR1034 Fax Boards in the same chassis.**

### Analog

CPU: PowerPC 8241 @ 200 MHz  
 DSP: T1 C5402 (61 MIPS total)  
 Network interface: 1 or 2 ALS  
 Signaling: FCC part 68 and TBR21  
 Physical: Half-size 6.6 in. long x 4.376 in. wide, 33 MHz PCI 2.2 universal card (3.3/5 V signaling)  
 Server Bus: PCI: 33 MHz PCI 2.2 universal card (3.3/5 V signaling);  
 PCIe: x4, x8, or x16 slots  
 Power: PCI: 5 W, both +3.3 V and 5 V power supply required;  
 PCIe: 2 Channels, 12 W  
 Up to 4 boards per server

### BRI

CPU: PowerPC 8241 @ 200 MHz  
 DSP: TI C5402 (61 MIPS total)  
 Media channels: Up to 4 V.17 fax  
 Network interface: 1 or 2 BRI  
 Signaling: ISDN BRI, Euro, Japan  
 Physical: Half-size 6.6 in. long x 4.376 in. wide, 33 MHz PCI 2.2 Universal card (3.3/5 V signaling)

Server Bus: PCI: 33 MHz PCI 2.2 Universal card (3.3/5 V signaling);  
 PCIe: x4, x8, or x16 slots  
 Power: PCI: 5 W, +5 V power supply required; PCIe: 2 channels, 12 W, x4, x8, or x16 slots  
 Up to 4 boards per server

### Environmental

Temperature: 0° – 50°C operational  
 Humidity: 10% – 95% (non-condensing)

### Fax

Up to 14.4 kbps with auto fallback  
 ITU T.30; Group 3  
 Analog: V.17, V.27, V.29, V.33 modulation  
 BRI: V.17, V.27ter, V.29 modulation  
 Normal and fine resolution: 100x200, 200x200  
 Analog-MH and MR compression, BRI-MH, MR compression; 250 and 450 BRI- MH, MR, and MMR compression plus ECM  
 Onboard image conversion  
 A4 page size  
 Format conversion "on-the-fly": ASCII, TIFF-F call progress and call control  
 Dialing and call progress: Onboard DTMF generation and detection  
 Adaptive (SIT detection included), pulse, and DTMF  
 Inbound fax routing capability

## Technical Specifications (continued)

### BRI

International call progress and tone detection  
Programmable tone and cadence detection/generation  
CED, CNG, v.21 modem detection  
ANI/DNIS DTMF and MF detection

### Operating System Support

Windows®; Linux. Details at  
<http://www.dialogic.com/systemreleases>

### Installation and Configuration

Windows® Plug and Play Compliant

### Application Programming Interface

Dialogic® Brooktrout® Bfv API

### Environmental Compliance

This electronic equipment complies with the European Union  
Restriction of the Use of Certain Hazardous Substances in

Electrical and Electronic Equipment, Directive 2002/95/EC.

### Reliability/Warranty

Estimated MTBF Per Telcordia Method 1:

#### Analog (2 port)

PCI: 741,750 hours  
PCIe: 671,750 hours

#### BRI (2 port)

PCI: 857,300 hours  
PCIe: 815,600 hours

Warranty information at <http://www.dialogic.com/warranties>

### Approvals

US/Canada, European Union, Iceland, Norway, Switzerland,  
Australia, Japan, New Zealand, and South Africa  
For current certifications and approvals, contact your Dialogic  
sales representative.

## Ordering Information

The following table provides ordering information for Dialogic® Brooktrout® TruFax® Fax Boards.

Product Code	Order Code	Description
Trufax 100-R PCI HALF*	901-004-07	1 Channel Loop Start; half-size Universal PCI
Trufax 100-R PCI UK HALF*	901-004-09	1 Channel Loop Start; half-size Universal PCI for the UK
TruFax Full Size 100-R Europe	901-002-15	1 Channel Loop Start; Universal PCI
TruFax Full Size 100-R UK	901-002-17	1 Channel Loop Start; Universal PCI
Trufax 100E HALF	901-013-08	1 Channel Loop Start; half-size Universal PCIe
Trufax 100E HALF UK	901-013-09	1 Channel Loop Start; half-size PCI Express for the UK
Trufax 200-R PCI HALF*	901-004-08	2 Channel Loop Start; half-size Universal PCI
Trufax 200-R PCI UK HALF*	901-004-10	2 Channel Loop Start; half-size Universal PCI for the UK
TruFax Full Size 200-R Europe	901-002-16	2 Channel Loop Start; Universal PCI
TruFax Full Size 200-R UK	901-002-18	2 Channel Loop Start; Universal PCI for the UK
Trufax 200E HALF	901-013-10	2 Channel Loop Start; half-size PCI Express
Trufax 200E HALF UK	901-013-11	2 Channel Loop Start; half-size PCI Express for the UK
TruFax 200-R BRI (2B+D)	901-003-07	2 Channel, Single Euro BRI
TruFax 200E BRI (2B+D)	901-012-07	2 Channel, Single Euro BRI, RoHS, PCI Express
TruFax 250-R BRI (2B+D)	901-003-08	2 Channel, Single Euro BRI with MMR & ECM
TruFax 250E BRI (2B+D)	901-012-08	2 Channel, Single Euro BRI w/ MMR & ECM, RoHS, PCI Express
TruFax 400-R BRI (4B+2D)	901-003-09	4 Channel, Dual Euro BRI
TruFax 400E BRI (4B+2D)	901-012-09	4 Channel, Dual Euro BRI, RoHS, PCI Express
TruFax 450-R BRI (4B+2D)	901-003-10	4 Channel, Dual Euro BRI with MMR & ECM
TruFax 450E BRI (4B+2D)	901-012-10	4 Channel, Dual Euro BRI with MMR & ECM, RoHS, PCI Express

Note: Requires Dialogic® Brooktrout® SDK Version 5.0.0 or greater



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