

1 GENERAL INFORMATION

1.1 Product description

PCX11+/24 is a dual channel sound board for PCI bus (half length format), It features balanced analog inputs and outputs, an LTC (SMPTE) input, digital input/output in AES/EBU or SPDIF formats, and two General Purpose Interface (GPI) inputs and outputs.

It also exists the VX222 PCI sound board, which is the same card that the PCX11+/24 one, with less function available;

Removed functions are:

- Analog CDRom input
- Synchronous AES/EBU input
- SMPTE time code
- A part of the software isn't available.

PCX11+/24 and VX222 cards are together using the same printed circuit board, but on VX222, not all components are loaded.

See attachment A, for further description and technical features of the product submitted.

1.2 Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3 Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system (including inserted cards, which have grants) are :

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
PCX11+/24 ⁽¹⁾ (sn: proto2)	IGTPCI11-24	Dual channel sound board	Unshielded signal cables
HP VECTRA BRIO 6769A#ABF (sn: 28019902)	K4UVECTRAVL5	Personal computer	Unshielded power cord
HP Deskjet 660C C2164A ⁽²⁾ (sn: ES5891300Y)	B94C2164X	Parallel printer	Shielded cable
HP C4734 ⁽²⁾ (sn: M97060579)	CIGE03614	Keyboard	Shielded cable
Labtec LT-100R	NA	Headphone	Shielded cable
SENNHEISER HD330	NA	Headphone	Shielded cable
HP D2846A ⁽²⁾ (sn: JP74001005)	NA – DoC procedure	21" video monitor	Shielded video cable
HP C3751B ^{(2)v} (sn: LZA65353972)	DZL210582	Mouse	Shielded cable
Intel YC76 (sn: 0047075)	EDUYC76	USB Camera	Shielded cable
HP 48GX ⁽²⁾ (sn: 3621508954)	NA	Serial Calculator	Shielded cable
Labtec 60804 FI	NA	Speaker	Shielded cable
HP Deskjet 890C C5876A ⁽³⁾ (sn: SG7921J0T3)	B94C4602X	Parallel printer	Shielded cable
HP D2846A ⁽³⁾ (sn: JP81545325)	NA – DoC procedure	21" video monitor	Shielded video cable
HP C4732-60101 ⁽³⁾ (sn: M97040007)	CIGE03614	Keyboard	Shielded cable
HP C3751B ⁽³⁾ (sn: LZA65351347)	DZL210582	Mouse	Shielded cable
HP 48GX ⁽³⁾ (sn: 3552S02671)	NA	Serial Calculator	Shielded cable

(1) EUT submitted for grant

(2) Equipment used for conducted emission only

(3) Equipment used for radiated emission only

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992, CISPR22-1993/A1:1995 and EN55022:1994/A1:1995.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5 Test facility

The test facility used to collect the radiated and conducted data is the Hewlett Packard Quality Engineering Test Center B10 EMI facility located 5 avenue Raymond Chanas – EYBENS, 3853 GRENOBLE, France. This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-1992 in a letter dated August 19, 1996 (31040/SIT, 1300F2).

This test facility has also been accredited by COFRAC (French accreditation authority for European union test lab accreditation organization), accreditation number 1-0199 as compliant with test site criteria and competence in EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.

2 ATTACHMENT A – PRODUCT DATA SHEET OF PCX11+/24



PCX11+/24 Dual Channel Sound Card

The **PCX11/24** is one of our most popular models for broadcast automation and audio production. It features balanced analog inputs and outputs, an LTC (SMPTE) input, digital input/output in AES/EBU or SPDIF formats, and two General Purpose Interface (GPI) inputs and outputs.

CONFIGURATION

Bus/Format	PCI target mode
Digital signal processor	56002 at 66MHz
RAM	128 kWords
Size	175mm x 99mm
Power requirements	0.5A/0.2A/0.1A
+5V/+12V/-12V	
Operating: temp/humidity (non condensing)	0°C/+50°C -5%/90%
Storage: temp/humidity (non condensing)	-5°C/+70°C 0%/95%

INPUTS/OUTPUTS

Analog inputs (stereo)	one balanced
Maximum input/impedance	+22dBu/600Ω or >10kΩ
Programmable input gain	digital and analog
Digital inputs (stereo)	one AES/EBU or SPDIF
Other inputs	LTC, CD-ROM (8dBu max), GPI, AES/EBU or SPDIF sync input
Analog outputs (stereo)	one balanced
Maximum output/impedance	+22dBu/low impedance
Programmable output gain	digital and analog
Digital outputs (stereo)	one AES/EBU or SPDIF
Other outputs	headphone (600Ω), two GPI (relay, 0.5A, 48VCC)
Access to main status bits of digital frame	yes
AES11 synchronization	yes
Connectors	15-pin SUB-D for analog I/O; 15pin HD SUB-D for digital I/O, sync and GPI; headphones

AUDIO SPECIFICATIONS

Sampling frequencies available	48, 44.1, 32, 24, 22.05, 16, 11.025, 8kHz
A/D and D/A converters resolution	24 bits
Frequency response at 48kHz (rec + play)	20Hz – 20kHz: ±0.2dB
Signal to noise ratio (unweighted)	>93dB
THD + noise at 1kHz (rec + play)	<-90dB
Channel phase difference 20Hz /20kHz	<0.5° / 2°
Analog channel crosstalk at 1kHz	<-95dB

DEVELOPMENT ENVIRONMENT

Digigram management	np SDK
Other management	Wave
OS supported	Windows 95/98, NT 4.0

PRELIMINARY



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