

HDTV 998 – ATSC/NTSC RF Output Card

Specifications Document Ver 1.0

Driver: Device7021.sys 30.6KB (31,425 bytes) 2-24-03

Location: C:\WINNT\System32\Drivers\

DLL: Board973.dll 796KB (815,104bytes) 2-26-03

Location: C:\program files\Sencore\DTV_NTSC_S-Video\

FPGA Code: XilinxR1.dat 328 KB (336,685 bytes) 2-26-03

Location: C:\program files\Sencore\DTV_NTSC_S-Video\

Registry: HKLM\System\CurrentControlSet\Services\Device7021

DTV RF Output:

Output Frequency:	UHF channel 14 through 21 (Selectable)
Output connector:	“F” connector
Output impedance:	75 ohm
Output power level:	-25 dbm +/- 2db
MER (SNR):	> 27 db
Modulation type:	8 level VSB trellis for ATSC Terrestrial Broadcast.
Audio/Video modes:	All modes modulated as carried in MPEG transport.
stream	

NTSC RF Output:

Output Frequency:	VHF channel 3 through 13 (Selectable.)
Output connector:	“F” connector
Output impedance:	75 ohm
Output power level:	+22 dbmV +/- 2db
Audio mode:	Mono
Video mode:	Letterbox, cropped or full-screen (API selectable)

System Specs:

RF output synchronization:	< 20 mSec.
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Pseudo-Seamless splicing:

PCR accuracy	< 500ns
PTS/DTS accuracy	< 1/90khz
TS Packet continuity	Per ISO/IEC 13818-1 2.4.3.3
Table Versions continuity	Per ISO/IEC 13818-1 2.4.4

TS File Encoding Restrictions:

Lead in/out black frames:	No restriction
Fade-in/out:	No restriction
TS Encoding:	1080i
Maximum Programs:	1 Program containing 1 Video and 1 Audio service
Program PID definitions:	Video PID: 17 (0x011) Audio PID: 20 (0x014)
TS clip start:	Closed GOP
TS clip end:	No restriction

PSI / PSIP Tables: Placeholders for minimal set of ATSC PSI/PSIP tables must be present in TS file. PSI/PSIP should be multiplexed at the PID locations and repetition rates given below:

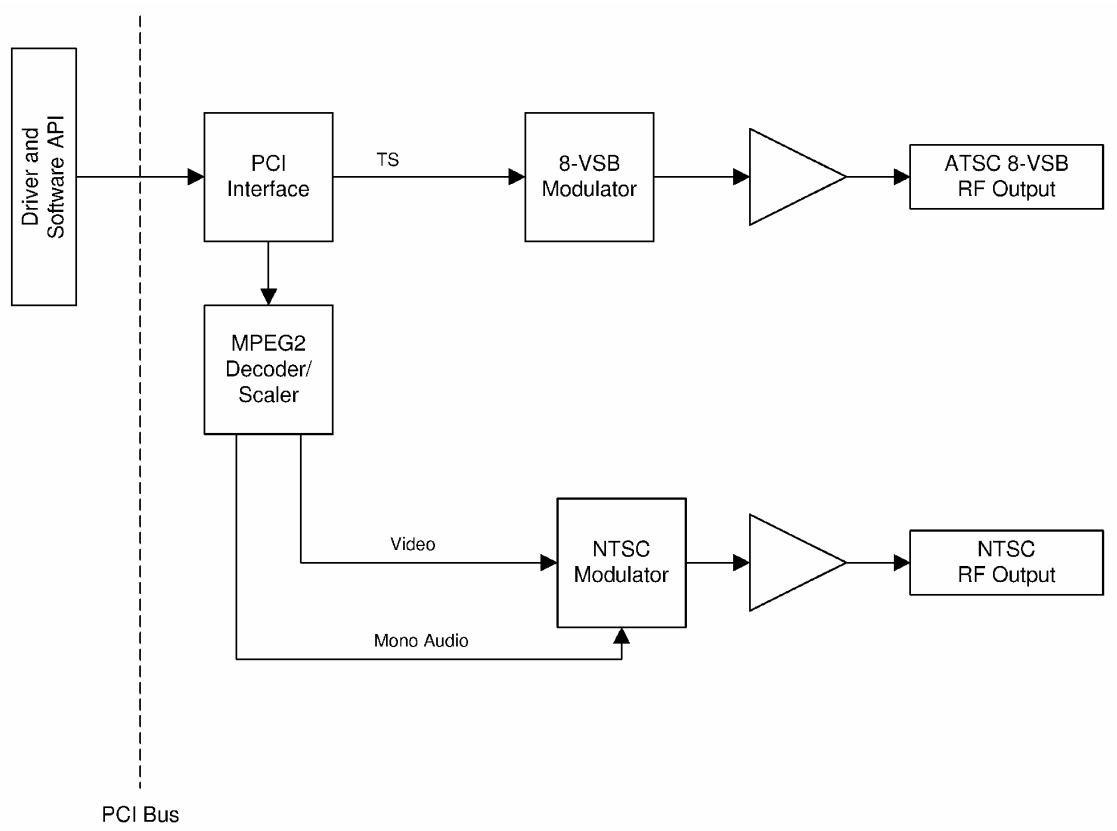
PAT PID: 0 (0x00), 100ms
PMT PID: 16 (0x10), 400ms
MGT PID: 8187 (0x1FFB), 150ms
TVCT PID: 8187 (0x1FFB), 400ms
STT PID: 8187 (0x1FFB), 1000ms
RTT PID: 8187 (0x1FFB), 60s
EIT-0 PID: 8144 (0x1FD0), 500ms
EIT-1 PID: 8145 (0x1FD1), 500ms
EIT-2 PID: 8146 (0x1FD2), 500ms
EIT-3 PID: 8147 (0x1FD3), 500ms

General:

O/S Compatibility:	WinNT / Win2000
Product form factor:	Single-slot, Universal PCI bus card
PCI Compliance:	PCI 2.2, PCI-X 2.0
Size:	Approx. 6" x 4" x ¾" (Length x height x clearance)
Weight:	~ 6 ounces
Power consumption:	Less than 10W
Operating Temperature:	10 to 40 degrees C (50 to 104 degrees F)
Humidity:	Less 95% (non-condensing)

Minimum System Requirements:

Processor:	500 MHz Pentium 3
Memory:	128MB
Disk Drive Speed:	7200RPM



OEM NTSC/ATSC PCI Output Card - Block Diagram

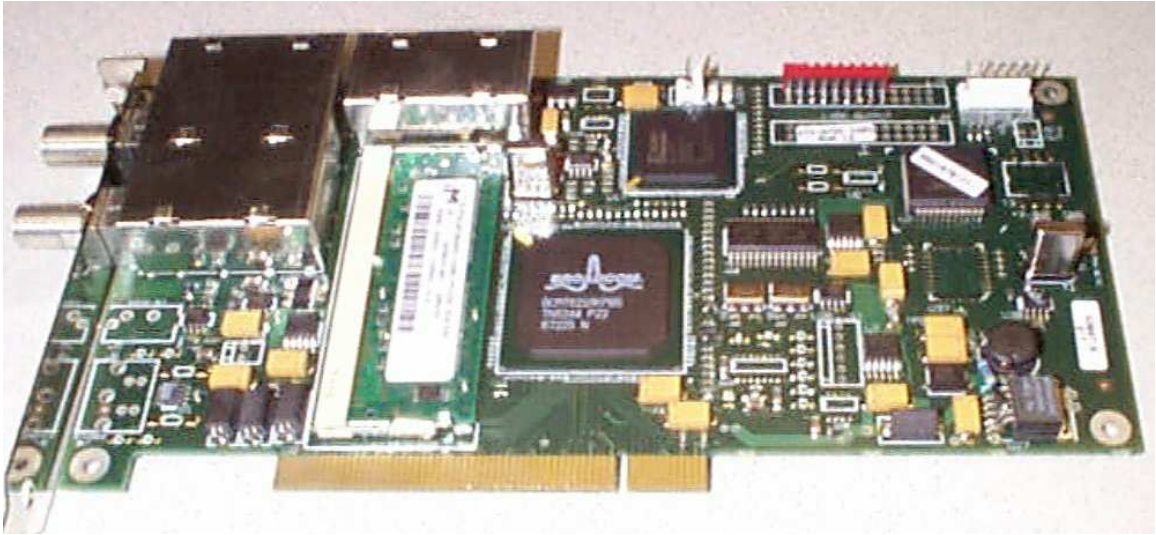


Figure 1 Front Side of Card

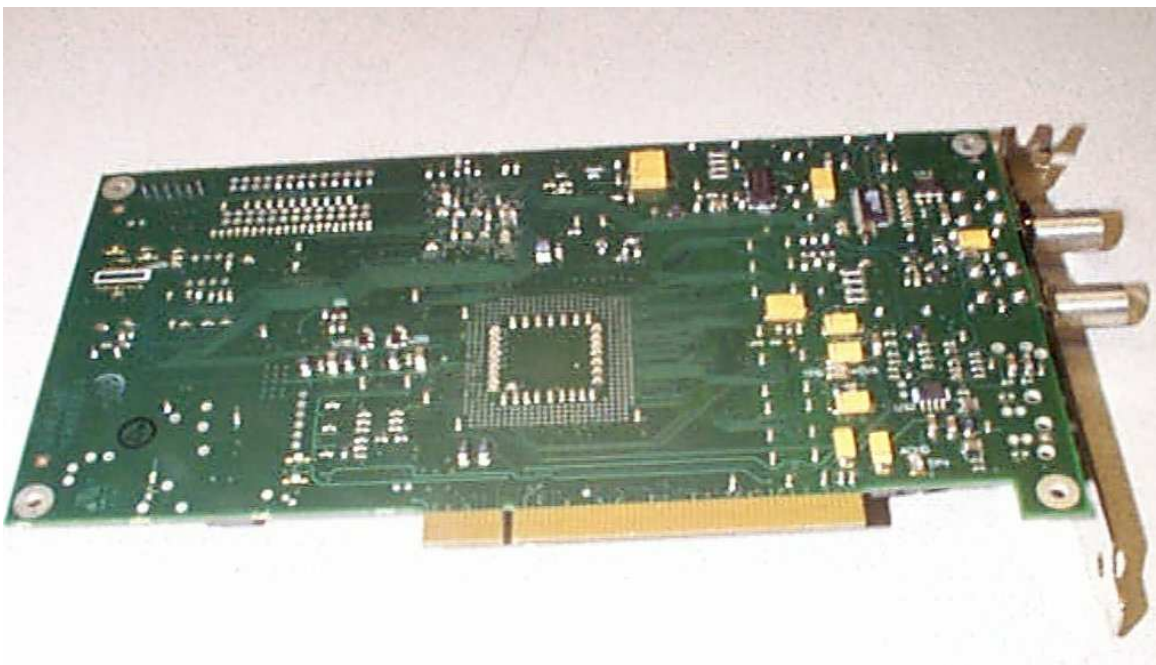


Figure 2 Back Side of Card