Confidential (as of MAR 29, 2005)

FTA-Model 725i

Engineering Specifications

A. General features

- Fully MPEG2, DVB compliant
- Digital Audio with AC-3 support by SPDIF
- PIG (Picture In Graphic) support
- Provide friendly and easy-to-use menu system
- Various channel editing function (favorite, moving, locking, renaming, deleting and sorting)
- Stores up to 5000 channels
- Easy and speedy software upgrade through RS-232 port
- Plug-and-play data transfer system (DSR to DSR)
- Timer function, automatically turns On/Off by setting function (daily, weekly, monthly and one time)
- Automatic reserved channel moving system
- Provide Electronic Program Guide (EPG)
- More than 800 pages OSD Teletext (DVB ETS 300 706) and Subtitle function support
- Support for various video output : CVBS, S-VHS, YUV
- 256 colors On-Screen-Display
- PAL/NTSC automatically conversion
- Last channel automatically saving

B. Engineering Specifications

1. Front-End

1-1. LNB & Tuner Input

Input frequency : 950 to 2150 Mhz

Digital signal input level : -65 to -25 dBm

LNB supply : 13.5±0.5V / 18.5±0.7V, max.500mA

Band switch control : 22KHz (Microprocessor control)

Connector : 2 x F-Type, 3/8-32UNEF-2A (1 Input / 1 Loop through)

1-2. Demodulator

Demodulation type : QPSK demodulation and FEC decoding

in accordance with DVB prETS 300 421

Symbol rate (Rs) : 2 < Rs < 45 Mbaud

SCPC and MCPC capable

2. Demultiplexing

In accordance with ISO 13818-1.

Simultaneous access will occur for the following:

- 1 video stream of data rate up to 15 Mbits/s
- 1 audio stereo/mono stream of data rate up to 448 kbits/s

32 PIDs Supported

3. Video Processing

Decompression : MPEG-2 Main Profile @ Main Level

With Letter Box filter

Video buffer : 64 Mbits of SDRAM is provided

Data rate : up to 15Mbits/s

(Max. burst rate: 228 Mbits/s)

Video output : PAL-25 frame @720 x 576

NTSC-30 frame @720 x 480

Video format : 4:3, 16:9

4. Audio Processing

Decompression : MPEG-1 layer I and II, Musicam

Outputs : Stereo Channel

Dual Mono

Joint Stereo Channel

Mono

Spdif with AC-3

5. Baseband Inputs / Outputs

5-1. Baseband Video

Video format : CVBS

Output impedance : 75Ω unbalanced

Bandwidth : 5MHz
Connector type : 1 x RCA

5-2. Baseband Audio Outputs

Connector type : 2 x RCA (Left and Right)

Output impedance : 600Ω unbalanced

Level : $0.6V \text{ rms} \pm 2dB \text{ into } 10k\Omega$

5-3. Digital Audio Output

Connector type : 1 x Optic

Output type : Spdif encoded signals with ac-3

Sampling frequency rate : 32, 44.1 or 48khz

5-4. S-VHS Output

Video format : Y,C

Output impedance : 75W unbalanced

Bandwidth : 5MHz

Connector type : 1 x 4pin DIN

5-5. Component Outputs (YUV)

Connector type : $3 \times RCA (Y Pb Pr)$ Output impedance : 75Ω unbalanced

6. Supply voltage to LNB

Voltage supply path : DC supplied from DSR on LNB coax cable

LNB type supported : LNB with integrated polarizer switch

LNB supply voltage : (software selectable)

. Vertical polarization : 13.5±0.5V DC

. Horizontal polarization : 18.5±0.7V DC

FSS/BSS Switching : A 22kHz±4kHz microprocessor controlled

switching signal is provided

Short circuit limit : 500mA

7. External Switched 12V

Software switchable : 12V or 0V

Current limit : 100mA

Connector type : 1 x RCA

8. Data Service Port

Connector : 9-pin D-sub male
Data protocol : RS232C interface

The DVB-DSR is seen as the Data Communication Equipment (DCE) and the PC (or other terminal) is seen as the Data Terminal Equipment (DTE).

Data rate : Maximum of 625K bits/s

Pin	Name	Function	Source
2	RXD	Receive data	PC
3	TXD	Transmit data	DSR
5	GND	Signal ground	

9. Microprocessor

Microprocessor : STM Sti5518

Clock frequency	:	81MHz	
SDRAM Memory	:	8Mbyte	
Flash memory	:	2Mbyte	
10. RF Modulator			
RF Output Signal	:	NTSC M	
Video Carrier Frequency	:	61.25 ± 90 kHz US 3 CH	
		67.25 ± 90 kHz US 4 CH	
11. Remote Control unit			
Number of keys	:	41 Keys	
Operating distance	:	up to 10m	
Batterys	:	2 x 1.5V (AAA type)	
12. Power Supply			
Туре	:	Switching mode	
Main input voltage	:	90 - 250V AC @ 50Hz/60Hz±5%	
Normal power consumption	:	30W	
Typical supply currents			
- +3.3V	:	0.9A	
- +5.0V	:	0.4A	
- +7.0V	:	0.3A	
- +12V	:	0.03A	
- +22V	:	0.4A	
- +30V	:	0.03A	
13. Physical Characteristics			
13-1. Front Panel			
Keys	:	8 Keys	
Indicators	:	Power on/off	
Remote control input	:	Infra-red receiver	
Display	:	4Digit (7Segment)	

13-2. Rear Panel

Connectors : 1 LNB Input / 1 Loop through output (2F-type : IEC169-24)

1 x 0/12 Volt (RCA) 2 x Audio L/R (RCA)

1 x CVBS (RCA)

3 x YUV (RCA)

1 x RS-232 (9-pin D-sub male)

1 x RF Modulator (2F-type : IEC169-24)

1 x S-VHS (4-pin Mini-Din)

1 x Digital Audio Output (optic)

Switch : 1 x AC Power Switch

NOTE) The above specification is subject to be changed without notice in advance.