

Operational Description of Satellite Receiver Pent@VALUE

(Please, refer to a block diagram attached)

1. General description

Pent@VALUE is fully DVB-S compliant cost effective PCI satellite receiver card and provide up to 80mbps IP filtering performance and high quality MPEG-II digital TV decoding using high performance bus master DMA mode.

Pent@Value can enable high performance DVB IP handling application such as DVB IP router, high speed file delivery, and high speed satellite internet.

Pent@Value provide TIS™, UDLR protocol driver for high performance satellite internet service.

2. PCI Controller

The part, FUSION878 and around circuit, is main controller such as PCI control, tuner control, LNB power control. Major function of this chip is PCI controlling and bridging the PCI BUS. The main PC can receive the transport data from the tuner and parse the transport packet by PID.

3. TUNER

The part, horizontal can type tuner made by SAMSUNG within HYUNDAI QPSK and around circuit, receive the satellite analog signal and convert to digital transport data to the 8bit data bus. The 8bit data is transferred to the PCI controller to transfer the main PC. So the tuner include the analog part and simultaneously digital coding part.

4. LNB Power

The part, LNB power circuit, is needed for satellite antenna. The satellite antenna use 18V and 13V DC power. The two type of power is made by the circuit LNBK20D2 is switched by PCI controller. And tuner use the tuning voltage about 30V. The tuning voltage is made by LT1613 circuit.