STi7200
Triple display, HDTV set-top box, dual decoder for H.264 and VC-1

Features
- Single-chip, high-definition STB decoder:
  - H.264 and Microsoft® VC-1 compatible
  - Linux®, Windows® CE and OS21 compatible ST40 CPU core
  - Supports NAND flash, NOR flash and Sflash
  - Local memory 2 × DDR2 333 MHz
  - Transport filtering and descrambling
  - Dual H.264, MPEG-2, VC-1 video decoding
  - SVP compliant
  - Windows® DRM support
  - Triple display composition
  - Integrated VHF channel 3/4 modulator
  - Dual audio decoder, including Windows Media® Audio 9 (WMA-9) and WMA-9 Pro
  - DVD data retrieval and decryption
  - HD DVD/BD compliant
  - DVR capable
  - HDMI/HDCP interface with CEC line
  - IQI (Image Quality Improvement) support

Connectivity:
- Triple USB 2.0 host controller/PHY
- Digital audio and video auxiliary inputs
- Low-cost modem support
- Dual 100BT ethernet controller, MAC and MII/RMII interface for external PHY
- Dual serial ATA (SATA)
- High speed synchronous interface (MPX) to STVi498 cable and DOCSIS front-end chip

ST40 core
UDI 16 KiCache
MMU
Int. control
32 K Dcache

2× SATA
3× USB 2.0
2× Ethernet MII/RMII
32
32

Video decoder
VC-1 (inc WMV-9) H264/MPEG-2
2×

2× Ethernet MII/RMII for 100BT Ethernet
Hard disks

PCM in
PCM out 1
PCM out 2
PCM analog out 1
PCM analog out 2
S/PDIF

Audio interfaces
Audio decoder ST231 core
Audio decoder ST231 core

2× SmartCard interface
2× IR Tx/Rx
4× GPIO
5× UARTs

2× DISEqC
8× GPIO
ILC

Flex VPE

Display composer mix 1 to 3
HD disp proc

Local HD
VHF mod

Local SD
VHF DAC

Remote SD
TLTXT

Remote video output (SD)

Local video output (HD)

TS inputs

MII/RMII for 100BT Ethernet

Peripheral I/O and external interrupts

16 K Icache

16 K Icache

Int. control

16 K Icache

32 K Dcache

Audio DACs

SD

HD

Local video output (SD)

Remote video output (SD)

Flash or companion chip

Local video output (SD)

Remote video output (SD)

Local video output (HD)

HD disp proc

2×

STBus

Clock generator and system services

SECTP

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4

6

6