MB86391
MPEG-2 Single-chip audio/video encoder

Description
The MB86391 is a full MP@ML compliant MPEG-2 encoder that integrates video, audio and system encoders all on a single chip. The MPEG-2 encoder takes advantage of the high-performance MPEG-2 compression algorithm developed by Fujitsu. This device is a combination of hardware and software processed by an internal SPARClite CPU. It is expected to be a key component for realising higher performance and more compact digital audio-visual equipment, such as disk recorders, camcorders, video communication, etc.

Features
• Single-chip encoder
• Video encoder
  • MPEG-1 (ISO/IEC11172-2)
  • MPEG2 MP@ML encoding function (ISO/IEC13818-2)
  • NTSC and PAL video formats
  • Maximum bit-rate is 15Mbps
  • Video input interface: ITU-R656
• Audio encoder
  • MPEG1 Audio layer-1/2 encoding function (ISO/IEC11172-3)
  • Maximum bit-rate is 448kbps
  • Audio interface: I2S
• System multiplex
  • Output format is selection of PS, TS and MPEG-1 System
  • Constant or variable bit-rate (CBR/VBR)
  • Maximum bit-rate is 20Mbps
  • External or internal TS clock
• External memory
  • SDRAM: 4 x (1M x 16-bit) or 2 x (2M x 32-bit)
• Time base corrector (TBC)
• Internal 32-bit RISC processor
• Package: HQFP-208
• Operating temperature: -20 to +85°C
• Power consumption: typ. 550mW
**Typical Applications**

- Video distribution systems
- Car entertainment systems
- Video conference systems
- Digital video recorder
- D-VHS recorder
- D-STB, Personal Video Recorder (PVR)
- Video disk recorder
- MPEG-2 PC encoder card
- Surveillance systems
- Head-end stations