# **Product Profile**



## **MB86393**

### MPEG-2 Single Chip Audio/Video Encoder

September 2002 Edition 1.00

FME/MM/PP/0902

#### **OVERVIEW**

**Fujitsu's MB86393** is a full MP@ML compliant MPEG-2 encoder that integrates video, audio, system encoders including memory (FCRAM) and PCI interface 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 highly 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-R 656
- · 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
- Internal FCRAM Memory in System in Package (SiP) technology
- PCI Interface (V2.2)
- · Frame Synchronizer
- Internal 32bit RISC processor
- Package: FLGA 288 pin
- Operating temperature: 0°C to +70°C
  Power consumption: typ. 800mW

#### 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
- and more ...



## MB86393 MPEG-2 Single Chip Audio/Video Encoderom

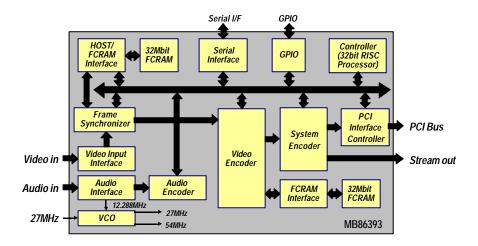


Figure: Block Diagram

Contact Information	Email: multimedia_info@fme.fujitsu.com
Joinage milorination	Email: mailimedia_ime @mio.rajited.com

## **Worldwide Headquarters**

Japan Asia

Tel: +81 3 5322 3347 Fax: +81 3 5322 3386 **Fujitsu Limited** Corporate Global Business Support Division **Electronic Devices** ShinjukuDai-Ichi Seimei Bldg.7-1 Nishinjuku 2-chome, Shinjuku-ku Tokyo 163-0721

Tel: +65 281 0770 Fax: +65 281 0220 **Fujitsu Microelectronics Asia** 

Singapore 556741

PTE Limited #05-08, 151 Lorong Chauan New Tech Park

Japan

http://www.fujitsu.com/ http://www.fmal.fujitsu.com/

**USA Europe** 

Tel: +1 408 922 9000

Fujitsu Microelectronics Inc. Fax: +1 408 922 9179 3545 North First Street San Jose CA 95134-1804

USA

Tel: +1 800 866 8608 Customer Response Center Fax: +1 408 922 9179 Mon-Fri: 7am-5pm (PST)

Tel: +49 6103 6900 Fujitsu Microelectronics Europe GmbH Fax: +49 6103 690122 Am Siebenstein 6-10

D-63303 Dreieich-Buchschlag

Germany

http://www.fma.fujitsu.com/ http://www.fme.fujitsu.com/

FME/MM/PP/0902 1.00

Page 2 of 2

Copyright © 2002 Fujitsu Microelectronics Europe GmbH

Disclaimer: The contents of this document are subject to change without notice. Customers are advised to consult with FUJITSU sales representatives before ordering. The information and circuit diagrams in this document are presented "as is", no license is granted by implication or otherwise.