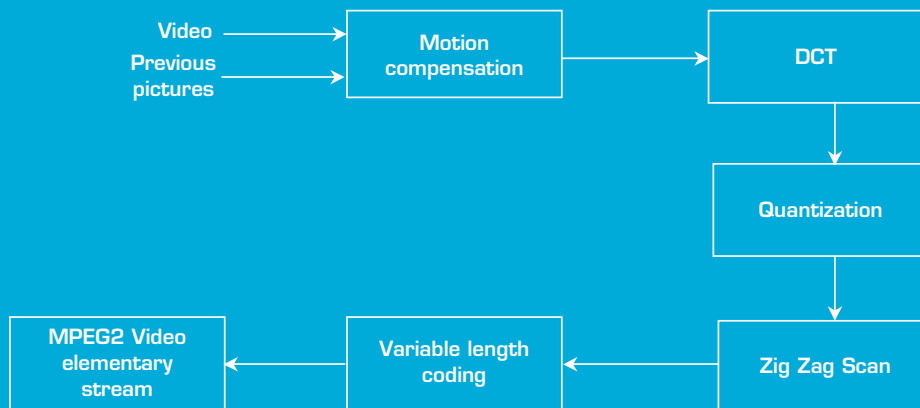


MPEG-2 encoder

Audio & Video for DSP



MPEG-2 algorithm
for video
applications

Hardware

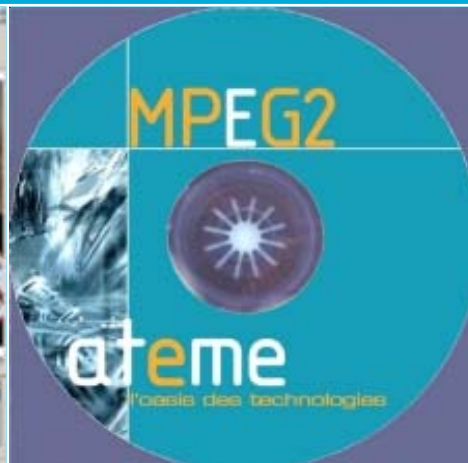
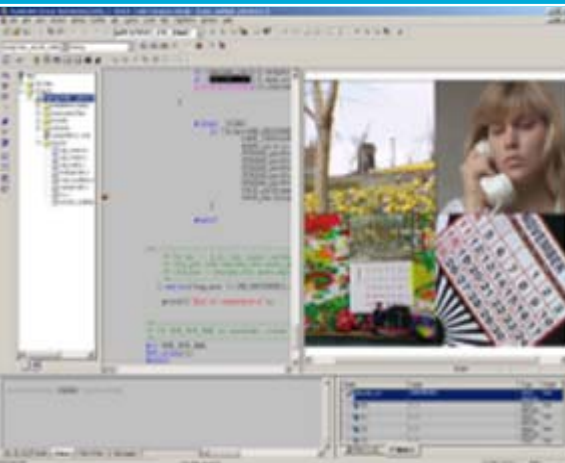
- Imaging Evaluation Kit products
- Dedicated to A/V algos evaluation
- Specific hardware integration



Imaging Evaluation Kit

Project Support

- Hotline: library use support
- Application engineer assistance
- Library customization
- Training
- Specific H/W or S/W designs



MPEG-2 is one of the most common standard used in video application such as Digital Television, Set Top Box, DVD player etc,...

ATEME offers a video elementary stream encoder based on DSP platform. It provides high performance (optimized software, re-entrant algorithm) with cost reduction. Moreover ATEME offers a complete MPEG-2 development platform (Hardware/Software) for video applications.



Performance

KEY FEATURES


- C6400 platforms
- Hardware support
- Performance
- Flexibility
- Upgradeability
- Plug & Play technology demos

APPLICATIONS

- Set Top Box
- Digital Television
- Broadcast local Network
- In Flight Entertainment



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Ateme may change product characteristics without prior notice.

| Bit Stream/Format | | | Bit rate | C6416@600MHz CPU Load |
|--------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------|----------|--------------------------|
| "Aquarium"  | FULL PAL 720 x 576 | Encoder configuration: GOP size: 15 GOP config.: IP | 3 Mb/s | 67 % |
| | | | 5 Mb/s | 70 % |
| | | | 8 Mb/s | 73 % |
| | | | 15 Mb/s | 76 % |
| "Aquarium"  | FULL PAL 720 x 576 | Encoder configuration: GOP size: 15 GOP config.: IBBP | 3 Mb/s | 75 % |
| | | | 5 Mb/s | 77 % |
| | | | 8 Mb/s | 79 % |
| | | | 15 Mb/s | 81 % |
| "Boxing"  | FULL NTSC 720 x 480 | Encoder configuration: GOP size: 15 GOP config.: IP | 3 Mb/s | 69 % |
| | | | 5 Mb/s | 72 % |
| | | | 8 Mb/s | 74 % |
| | | | 15 Mb/s | 77 % |
| "Boxing"  | FULL NTSC 720 x 480 | Encoder configuration: GOP size: 15 GOP config.: IBBP | 3 Mb/s | 79 % |
| | | | 5 Mb/s | 80 % |
| | | | 8 Mb/s | 81 % |
| | | | 15 Mb/s | 83 % |

| | | | |
|---------------------------------------------|------------------------------------|-------------------------------|-------------------------------|
| Film example: Matrix (chapter 29) | Bit-rate GOP size Resolution | GOP Configuration CPU Load | GOP Configuration CPU Load |
| Platform: IEKC6416@600MHz | 5Mb/s 15 720 x 576 | IP 70% | IBBP 80% |

Features

Target

- DSP C64x (Texas Instruments)

Standard

- MPEG-2 MP@ML
- ISO/IEC 13818-2

Input

- YUV 4:2:0 in frame format

Output

- Compliant bitstream to ISO/IEC 13818-2

Hardware specifications

- No specific constraints needed on hardware design

Footprint

| | Program | Data |
|--------------|---------|--------|
| C6400 | 140 kB | 3.9 MB |

CD contents:

- MPEG-2 encoder library for C6400
- User's manual
- Application samples

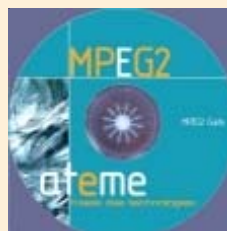
Related products

MPEG-2:

- Video Decoder
- Audio Codec

MPEG-2 Guide:

The purpose of the MPEG-2 Guide is to provide people interested in MPEG-2 with all the preliminary documentation they need to fulfill the first steps of a new project.



Hardware platforms:

- Imaging Evaluation Kit: IEK C64x
- Digital Media Evaluation Kit: DMEK 6414, DMEK 642

Emulation:

- aDICE710

To get updated benchmarks visit :

<http://www.ateme.com>
<http://extranet.ateme.com>

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