



JPEG Decoder

Product Data Sheet

v1.2

Updated: July 22, 2010

Features

- Supports Joint Photographic Experts Group (JPEG) image decoding
- Supports baseline and progressive modes
- Configurable support all the integer sampling formats allowed by the Baseline DCT coding. (4:4:4, 4:2:2, 4:2:0, 4:1:1 etc)
- Supports color conversion from YUV to RGB-565 or RGB-888.
- Configurable support for interleaved UYVY format
- Supports restart markers
- Supports JPEG, JFIF and EXIF thumbnails
- Hardware acceleration on i.MX platforms that have VPU

Supported Platforms

- Hardware – i.MX ARM9™ i.MX ARM11™ and ARM Cortex-A8™ platforms
- Software – eLinux, Windows® Embedded CE operating systems

Performance Details

i.MX ARM9 Platforms

Typical Specifications: 1MP

Performance (MHz): 70

Memory Footprint (KB):

- ROM: 50
- RAM: 20.75

i.MX ARM11 Platforms

Typical Specifications: 1MP

Performance (MHz): 50

Memory Footprint (KB):

- ROM: 50
- RAM: 20.75

i.MX Cortex-A8 Platforms

Typical Specifications: 1MP

Performance (MHz) 50

Memory Footprint (KB):

- ROM: 50
- RAM: 20.75

Performance measurements can deviate based on ARM core, memory and cache configuration on the board. To measure directly, enable the TIME_PROFILE in the test application provided in the release package.

For further details, contact Freescale customer representative.