



# VPU Encoder

## Product Data Sheet

V1.2

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### Features

- Support for multi-threaded environment
- Conformant to applicable standards.
- Encoding support from camera, file or streaming protocol
- Support for CBR and VBR
- Support for configuration of frame reduction
- Support for configuration of gop sizes and quality settings
- GStreamer plugin wrapper for Linux® platforms
- DirectShow filter wrapper for Windows® CE platforms
- OpenMAXIL layer component

### Supported Platforms

- Hardware – i.MX which includes VPU Hardware
- Software – eLinux, Windows® Embedded CE operating systems

## VPU Chip Details

VPU Chip Details	
i.MX27 Platform	Supported Codecs
<ul style="list-style-type: none"> <li>• Max Encode Resolution: D1</li> <li>• Max number of Instances: 2</li> </ul>	<ul style="list-style-type: none"> <li>• H.264 Baseline Profile Level 3</li> <li>• MPEG-4 Simple Profile Level 5</li> <li>• H.263 Profile 0 and Profile 3 Level 70</li> </ul>
i.MX51 Platform	Supported Codecs
<ul style="list-style-type: none"> <li>• Max Encode Resolution: D1</li> <li>• Max number of Instances: 4</li> </ul>	<ul style="list-style-type: none"> <li>• H.264 Baseline Profile Level 3</li> <li>• MPEG-4 Simple Profile Level 5</li> <li>• H.263 Profile 0 and Profile 3 Level 70</li> <li>• JPEG Baseline Profile</li> <li>• MJPEG Baseline Profile</li> </ul>
i.MX53 Platform	Supported Codecs
<ul style="list-style-type: none"> <li>• Max Encode Resolution: D1 (720p)</li> <li>• Max number of Instances: 4 (up to 16)</li> </ul>	<ul style="list-style-type: none"> <li>• H.264 Baseline Profile Level 3.1</li> <li>• MPEG-4 Simple Profile Level 5 (6)</li> <li>• H.263 Profile 0 and Profile 3 Level 70</li> <li>• JPEG Baseline Profile</li> <li>• MJPEG Baseline Profile</li> </ul>
iMX6Q/D Platform	Supported Codecs
<ul style="list-style-type: none"> <li>• Max Encode Resolution: 1080p</li> <li>• Max number of Instances: 4 (up to 16)</li> </ul>	<ul style="list-style-type: none"> <li>• H.264 Baseline Profile Level 4.0</li> <li>• MPEG-4 Simple Profile Level 7 and up to 720p</li> <li>• H.263 Profile 0 and Profile 3 Level 70 and up to 720p</li> <li>• JPEG/MJPEG Baseline Profile</li> </ul>

Encoding latency is affected by the configuration of the bitrate, gop size and quality settings.

*For further details, contact a Freescale customer representative.*