ArcticEdge/iMX6

Connect Tech’s ArcticEdge/iMX6 will twist your ARM beyond the average development board. ArcticEdge’s low-power, high performance design and extended temperature range make it a practical choice for taking your application from the developer’s desk into the field.

The i.MX6Q 800MHz Cortex-A9 processor gives the reliability needed for long life critical applications.

Specifications

<table>
<thead>
<tr>
<th>Processor</th>
<th>Freescale iMX 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Model</td>
<td>Freescale iMX 6</td>
</tr>
<tr>
<td>CPU Technology</td>
<td>Cortex A9</td>
</tr>
<tr>
<td>CPU Cores</td>
<td>4</td>
</tr>
<tr>
<td>CPU Clock Speed</td>
<td>800MHz</td>
</tr>
<tr>
<td>Instruction Cache</td>
<td>32KB per Core</td>
</tr>
<tr>
<td>Data Cache</td>
<td>32KB per Core</td>
</tr>
<tr>
<td>Unified L2 Cache</td>
<td>1MB shared by Cores</td>
</tr>
<tr>
<td>Coprocessor</td>
<td>NEON Media Processor per Core</td>
</tr>
</tbody>
</table>

Graphics

- OpenGL ES 2.0 3D acceleration with 4 shaders (up to 200MFLOPS), OpenCL, 2D accelerator and OpenVG™ 1.1 hardware acceleration
- Full 1080p encode/decode supporting multiple high resolution video inputs/outputs simultaneously
- Hardware Accelerators: VPU - Video Processing Unit, IPuV3H - Image Processing Unit version 3H (2 IPUs), GPU3Dv4 - 3D Graphics Processing Unit (OpenGL ES 2.0) version 4, GPU2Dv2 - 2D Graphics Processing Unit (BitBlt), GPUVG - OpenVG 1.1 Graphics Processing Unit
- ASRC - Asynchronous Sample Rate Converter
- Primary Display: HDMI 1.4 / TMDS
- Secondary Display: 18/24 bit LVDS with D/C/USB Touchscreen Interface

Operating System Support

- Linux and Android, Image and Source download available through Connect Tech’s Development Center

Memory

- Technology: DDR3
- Speed: 1066 (533MHz)
- Capacities: 1GB, 2GB option
- Bus Width: 64-bit

Gigabit Ethernet

- 1

Audio

- 1 x Output
- (w/ headphone amplification)

USB Host

- 4 (2 x Dual stacked Type-A connector, 2 x rugged latching header)

USB OTG / Client

- 1

RS-232 Ports

- 2

Micro SD

- 2

Wireless

- Integrated WiFi IEEE 802.11 b/g/n
- Integrated Bluetooth® 2.1+EDR Class 1.5 & Bluetooth® 4.0 BLE

Boot loader

- u-boot ships on internal 32Mbit SPI Flash

Input Power

- +5V only

Power Consumption

- Typical <5W

Form Factor

- 72 x 100 mm (PicoITX)

Temperature Range

- -40°C to +85°C (ArcticEdge uses Freescale Automotive Grade CPU)

FEATURES

- HDMI and LVDS Display Outputs
- i.MX6 Quad Core 800MHz ARM Cortex-A9 Processor
- Linux and Android BSP’s Available
- Extended Temperature Range -40°C to +85°C