



## Benefits

### Image Processing Unit

The i.MX35 processors feature an advanced IPU developed by Freescale. The IPU includes the functionality required for image processing and display management, including deblocking, deringing, color space conversion, independent horizontal and vertical resizing and blending of graphics and video planes. The IPU is optimized for WVGA resolution and is equipped with powerful control and synchronization capabilities to perform tasks with minimal to no involvement of the ARM® CPU.

### Graphics Processing Unit

Freescale's i.MX35 processors integrate an OpenVG 1.1 hardware accelerator to deliver smooth textural visuals required in today's automotive infotainment systems. The OpenVG core is also capable of native acceleration of Adobe® Flash, with the following benefits:

- Improved Web browsing experience with embedded Adobe Flash animation
- Faster time to market—Adobe animations automatically converted to C-code running on the i.MX35 processors—no hand-coding required

### Level 2 Cache Controller

Freescale was the lead partner in formulating the definition of the ARM11 L2 cache controller architecture and was the first ARM partner to license it. Freescale's level 2 cache controller, containing an ARML210™ core, and the accompanying 128 KB of embedded memory, combined with the ARM1136JF-S processor, can increase CPU performance and reduce system-level power consumption. By bringing more data on chip and closer to the CPU, the ARML210 level 2 cache controller helps remove the performance-limiting bandwidth constraints associated with off-chip memory.

### Product Development Kit

The i.MX35 product development kit (PDK), is a completely integrated hardware and

## Family Comparison

Feature	i.MX353	i.MX357
<b>Target Markets</b>	Consumer and Industrial	Consumer and Industrial
<b>Example Applications</b>	HMI: <ul style="list-style-type: none"><li>• Factory Automation</li><li>• Building Control</li><li>• Home Displays</li><li>• Medical</li></ul>	PND HMI: <ul style="list-style-type: none"><li>• Factory Automation</li><li>• Building Control</li><li>• Home Displays</li><li>• Medical</li></ul>
<b>Core</b>	ARM11™	ARM11™
<b>CPU Speed</b>	532 MHz	532 MHz
<b>L1 I/D Cache</b>	16K I/D	16K I/D
<b>L2 Cache</b>	128 KB	128 KB
<b>OpenVG 1.1</b>	-	Y
<b>LCD Interface</b>	Y	Y
<b>Ethernet</b>	1-10/100	1-10/100
<b>CAN</b>	2	2
<b>USB + PHY</b>	HS OTG HS Host	HS OTG HS Host
<b>I<sup>2</sup>C</b>	3	3
<b>MLB</b>	-	-
<b>SSI/I<sup>2</sup>S</b>	2	2
<b>SD/SDIO/MMC</b>	2	2
<b>SPI</b>	2	2
<b>UART</b>	3	3
<b>PATA/CE-ATA</b>	Y/Y	Y/Y
<b>Package, Speed, Temperature</b>	17 x 17 BGA 0.8 mm 400 ball, 532 MHz @ -20°C+70°C 532 MHz @ -40°C+85°C	

software solution that simplifies product development so developers can focus on critical differentiation needed for market success. Freescale offers comprehensive board support packages for both Linux and Windows Embedded CE operating systems with the PDK as well as optimized middleware such as audio and video codecs and digital rights management libraries.

### Multimedia Alliances Network

Combining resources from Freescale and industry leaders, the Freescale Multimedia Alliances Network offers advanced preintegrated platforms and solutions designed to work out-of-the-box, accelerating your business and giving you a competitive advantage. The Multimedia Alliances Network

includes hardware, software, tools, system integration and services partners. With early access to improved tools, Multimedia Alliances Network members are better equipped to deliver mobile and multimedia solutions to a global audience in less time, with less effort and at a lower cost. For more information about the Multimedia Alliances Network, visit [www.freescale.com/man](http://www.freescale.com/man).

### The i.MX Family

Freescale's i.MX family of applications processors serves a broad range of automotive, consumer, industrial and general purpose embedded applications. To learn more, visit [www.freescale.com/imx](http://www.freescale.com/imx).

## Learn More:

For current information about Freescale products and documentation, please visit [www.freescale.com](http://www.freescale.com).