Si14 - Embedded Solutions

iMX27SODIMM freescale

Overview

Complete Freescale iMX27 based solution on a standard SODIMM module.

Key benefits

• Low cost solution
• Standard SODIMM connector
• Powerful CPU (up to 400MHz)
• No video coding royalties
• Optimized for video acquisition and coding
• Ready to use design – reduced time to market
• No JTAG needed
• Windows CE 6.0 and Linux BSP freely available

Key features

• MPEG4, H.264, H.263 encoder/decoder
• On-the-fly video processing
• Powerful ARM9 processor
• USB 2.0 high speed (480Mbps)
• SDHC, MMC

• Integrated Fast Ethernet controller
• Up to 800x600 video controller resolution
• < 1.5 W power consumption
• Available in extended temperature range (-20 °C to + 85 °C)
• Automotive navigation system
• Human machine interface
• Voice over IP systems

This module comes with extended software support in order to reduce development costs and shrink time to market.
Software's support includes:

• uBoot
• WinCE and Linux BSPs
• Ready-to-use cross-compilation tools and environment
• Native, high performance Qt libraries

This allows the development of working applications in just a few days.
On iMX-27 module Si14 also offers support and assistance in producing custom boards, allowing the reduction of development time, certification and prototype costs.

Design support includes:

• Sample schematics
• Application notes for iMX-27 peripheral implementation

Ordering Information Part number Description:

• 0902A iMX-27L with 64MB DDR2 and 64MB Nand flash
• 0902B iMX-27 with 64MB DDR2 and 64MB Nand flashh
• 0902C iMX-27L with 128MB DDR2 and 128MB Nand flash
• 0902D iMX-27 with 128MB DDR2 and 128MB Nand flash

Specifications

CPU Type	ARM926EJ-S
CPU Speed	266 - 400 MHz
CPU Cache	16 KB/16 KB
DRAM	up to 128 MB DDR2 - 266MHz
Flash	up to 128 MB NAND Flash
Video acceleration	H.264, MPEG-4, H.263 HW Encoder and Decoder; 30 fps D1 Resolution Half Duplex, 24 fps VGA Resolution Full Duplex
Image Pre- and Post-Processor	Color Space Conversion, De-Block, De-Ring, Resize, Rotation, Mirroring
LCD Display size	Up to 800x600 24bit
Camera interface	CCIR656 or direct CMOS sensor
UART	3x 3.3v Universal Asynchronous Receiver/Transmitter
USB2 Host	1 USB Host High-speed – 480Mbps
USB2 OTG	1 USB On-The-Go High-speed – 480Mbps
MMC	yes
SDIO	yes
Ethernet	1 Fast Ethernet with integrated PHY
Keypad support	yes
Audio controller	Support for I2S or AC97 codec
I2C bus	1 I2C bus
SPI bus	2 SPI buses
Power supply	5V +/-5%
Power consumption	< 1.5 W
Operating temperature	-20°C to +85°C
Storage temperature	-20°C to +125°C