RC340
HIGH PERFORMANCE MULTIMEDIA PLATFORM

The RC340 Desktop Platform features dual Gigabit Ethernet and Dual Video support to enable the evaluation and development of high-performance, high-throughput multimedia and networked data applications. Fitted with a Xilinx Virtex-4 LX FPGA, the RC340 is available with a complete suite of algorithm implementation tools, IP and system-level APIs. It is ideally suited to high speed video and data applications using FPGA and MicroBlaze soft-core processor technology.

HARDWARE FEATURES
Summary of the RC340 hardware features:

FPGA
• Xilinx Virtex-4 4VLX160-10

MEMORY
• 4 banks * 2M * 36bits pipelined ZBT SRAM providing a total of 32Mbytes
• DIMM socket for user provided SDRAM memory
• SDcard FLASH socket

COMMS
• Dual Gigabit Ethernet MAC/PHY with 10/100/1000baseT sockets
• USB 2.0
• Dual RS232 ports
• PS/2 Keyboard and Mouse ports
• 4 momentary contact switches
• JTAG connector

VIDEO
• Dual Video support including:
  • Dual DVI In & Out
  • Dual Composite In
  • Dual S-Video In & Out
  • Dual VGA out

AUDIO
• AC97 compatible Audio
• Microphone in

• Line in (Stereo)
• Line/headphone out (stereo)
• SPDIF Digital audio

DISPLAY
• 1024x768 12.1" TFT flat panel display and touch screen
• 16 character by 4 line illuminated LCD display
• 8 white user-programmable LEDs

EXPANSION
• 50 pin expansion header including:
  • 33 general I/O pins (layout compatible with ATA UDMA-4 or higher)
  • 3 power pins (+12V, +5V, +3.3V)
  • 2 clock pins

MICRO CONTROLLER
• USB port management
• FPGA configuration / reconfiguration
• SDcard management
PACKAGE AND OPTIONS

PACKAGE

• Universal 110/240V power supply
• Pre-programmed SD card including:
  • Demos
  • Test programs
• Perspex top and bottom covers
• Hard carrycase, USB cable

SOFTWARE

• RC340 Platform Support Library
• API’s for platform abstraction and MicroBlaze soft-core processor integration
• FTU bit file transfer utility (Windows 2000/XP)

SOFTWARE OPTIONS

• PixelStreams Video Processing Library
• DK Design Suite

LIST OF DEVICES

• FPGA: Virtex 4 4VLX160-10
• Synchronous SRAM: Samsung K7M323625M
• Ethernet PHY: Marvell 88E1111
• Ethernet MAC: Intel IXF1104
• Video Input Processor: Philips SAA7113H
• High Speed Video DAC: Analog Devices ADV7123
• DVI Transmitter: Texas Instruments TI TFP410
• DVI Receiver: Texas Instruments TI TFP403
• RGB-NTSC/PAL Encoder: Analog Devices AD725
• PLL Clock Generator: Serial-Programmable Flash-Programmable Cypress CY22393
• Logic Audio Codec Crystal: Cirrus CS4202-JQ
• Touch Screen Controller: TI TSC2200

ORDERING INFORMATION

Contact agility_support@mentorn.com for availability and pricing. Please note that specifications are subject to change without notice.