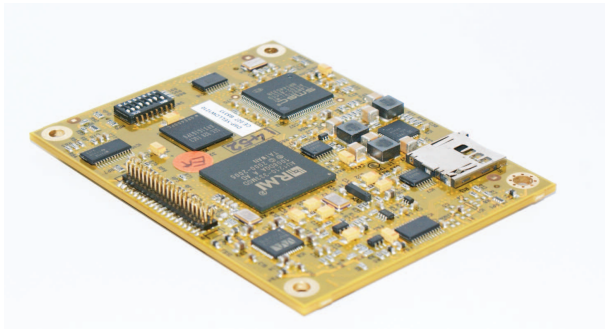


YELLOW1210

Low-Power Alchemy™ CPU Solution



YELLOW1210 is a high performance credit-card size single board computer optimized for use in embedded projects. YELLOW1210 combines the power of the Broadcom® Alchemy™ Au1210™ processor with a carefully selected set of peripherals optimized for high functionality, low power and small form factor. DSP Design has engineered the high risk elements of the system. You receive a fully tested module loaded with an operating system ready for your integration.

The YELLOW1210 is a RoHS compliant board. Low power consumption in normal operation and during sleep modes make the YELLOW1210 ideal for battery operated systems. It requires only a single 5V input.

Advanced Multimedia Technology

The Broadcom Alchemy™ Au1210™ processor incorporates an integrated Media Acceleration Engine (MAE) optimized for video to eliminate the need for DSPs and specialized coding. This means less overall power consumption and a simplified design.

Stable Development Platform

The Au1210™ processor is designed for applications including: Portable Media Players (PMPs), automotive infotainment, navigation, Digital Media Adapters (DMAs), industrial controllers and data loggers.

A preconfigured Microsoft Windows CE operating system is available for the YELLOW1210. Development is speeded by the availability of the LaunchPad Application Development Kit for YELLOW1210 which provides: the processor board, touchscreen TFT display and all the connectivity you need to start development.

The credit card size board provides on-board memory along with a micro SD socket for further memory expansion. Communication options include two RS232 serial ports, a 10/100Base-T Ethernet port and two USB host ports. A 16bit parallel display interface is included, supporting a wide range of TFT LCDs at resolutions up to 1024 x 768. Audio is provided by an AC97 codec providing mono microphone input, stereo line input, stereo line output, mono speaker output and four-wire resistive touch screen controller.

Expansion is provided by I2C and 17 general purpose I/O signals for user I/O. The operating system may switch off unused circuitry for extremely low power consumption in power managed states.

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Features

Processor	The Au1210™ processor uses the Broadcom® Alchemy™ micro-architecture and complies with the MIPSII instruction set
Memory	64Mbytes of DDR SDRAM soldered to the board
Storage	128Mbytes of NAND Flash, typically for the operating system and file system One Micro SD socket for memory expansion
Display	16-bit parallel interface supporting a wide range of TFT LCDs at resolutions upto 1024 x 768
USB	One USB 1.1 host port One USB 1.1 On-The-Go port configurable as host or client
Serial	Two serial ports. COM1 is (Tx & Rx only) RS232, and COM2 is full function RS232
Ethernet	One 10/100 Base-T Ethernet port
Audio	AC97 codec providing mono microphone input, stereo line input, stereo line output, mono speaker output and four-wire resistive touch screen controller
Touch Screen	4 wire resistive Touch Screen Controller
Expansion	One I2C multi-master serial bus 16-bit bus providing flexible expansion 17 general purpose I/O signals for user I/O
Real Time Clock	Battery backed Real Time Clock
Watchdog	Watchdog Timer generating cold and warm resets
Mechanical	85mm x 65mm form factor
Power	Powered from a single 5V input
Environmental	0 to +70° C operating temperature range