

News Highlights – February 2007:

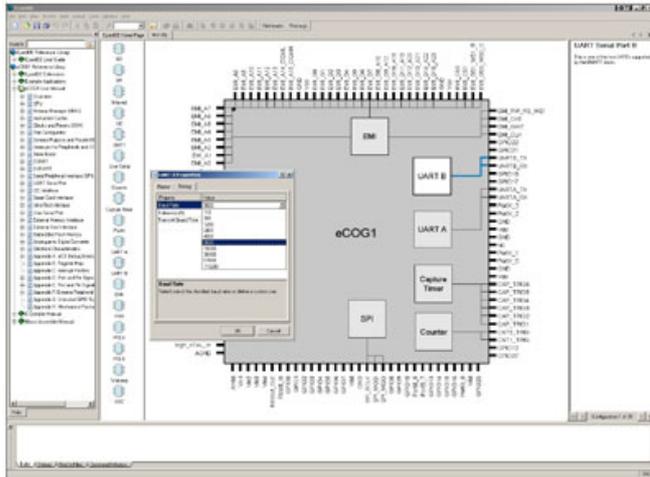
[CYAN TECHNOLOGY Introduces Low-power, High-performance eCOG1X 16-bit Microcontrollers](#)

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Cyan Technology Introduces Low-power, High-performance eCOG1X 16-bit Microcontrollers

Cyan Technology, available from [GLYN High-Tech Distribution](#), is now shipping its latest family of low-power, feature-rich 16-bit microcontrollers, the eCOG1X range. eCOG1X offers 42 MIPS processing performance – tripling that of current eCOG devices, and has been designed to address an array of demanding applications, including: ePOS, telematics, security, access control, pay phones, consumer, motor control and networking.



The 70MHz devices are highly configurable, with options for USB 2.0 OTG, 10/100 Ethernet MAC and Analogue I/O. Each combination is also available with different onboard memory options, including up to 512Kbytes of on-chip Flash and 24Kbytes of SRAM.

All Cyan's microcontrollers offer reconfigurable and flexible peripherals. Using CyanIDE®, the designer can set up peripherals with minimal programming effort and link them to whichever device

pins suit their application. The latest release of CyanIDE, version 1.4, caters for the new eCOG1X family and can utilize the extended peripherals and improved core performance to help solve more challenging applications with less complication and at lower cost.

"The eCOG1X product family and CyanIDE development toolset deliver innovative, peripheral-rich, embedded control solutions. This allows OEMs to benefit from significant price and performance advantages. The 16-bit eCOG1X has capabilities comparable to many 32-bit microcontrollers for embedded communications, but with the added benefit of being easier to use, requiring lower power consumption and having significantly reduced development time. The eCOG1X device also has significant USB capability. With a minimum of external components, it is able to act as a USB2.0 full-speed (12Mbs) device in host, peripheral or OTG modes - and with the addition of a low-cost external PHY, the eCOG1X is capable of high-speed (480Mbs) data rates, making the eCOG1X the only 16-bit microcontroller on the market today with this combination of USB modes and data rates," according to Cyan Technology.

The eCOG1X also features:

- A new analogue section including two flexible 12-bit DACs with a 4µs settling time
- Dual ADCs which can simultaneously sample analogue inputs with between 6- and 12-bits resolution for motor control applications
- Dedicated 6 channel PWM output for 3-phase motors
- LCD controller with support for direct and multiplexed drive of 1 to 4 backplane lines

- eICE built in emulator that can program the internal Flash
- Fully-configurable MMU and vectored interrupt modes
- Products are available in a variety of Flash memory sizes and peripheral options in 68-pin QFN, 100-pin QFN and 208-pin BGA packages



GLYN Announces Bluegiga Bluetooth Module Promotion

GLYN in conjunction with Bluegiga is launching a promotional campaign for Bluegiga's WT11 and WT12 Class 1 and Class 2 Bluetooth modules. Free WT11 and WT12 modules will be given to the first 50 registrants with Bluetooth applications at GLYN's website www.glyn.com.au!

Bluegiga's modules are completely integrated, certified high-performance Radio Frequency products. These modules win designs over the competition every day, because it simply works.



WT11 and WT12 are Class 1 and Class 2 respectively, next-generation, Bluetooth® 2.0+EDR (Enhanced Data Rate) modules. Both modules introduce three times faster data rates compared to

existing Bluetooth® 1.2 modules even with lower power consumption! WT11 and WT12 are highly integrated and sophisticated Bluetooth® modules, containing all the necessary elements from Bluetooth® radio to antenna and a fully implemented protocol stack. Therefore WT11 and WT12 provide an ideal solution for developers who want to integrate Bluetooth® wireless technology in to their design with limited knowledge of Bluetooth® and RF technologies. WT11 and WT12 modules combined with Bluegiga's complete development, testing and verification service offering and excellent developer support enable OEMs and designers to reach the market rapidly and cost-effectively in relation to time and resources. Bluegiga has in-house knowledge of both software and hardware offering customers a single point of contact to all Bluetooth® related issues.

Key WT11 and WT12 Features:

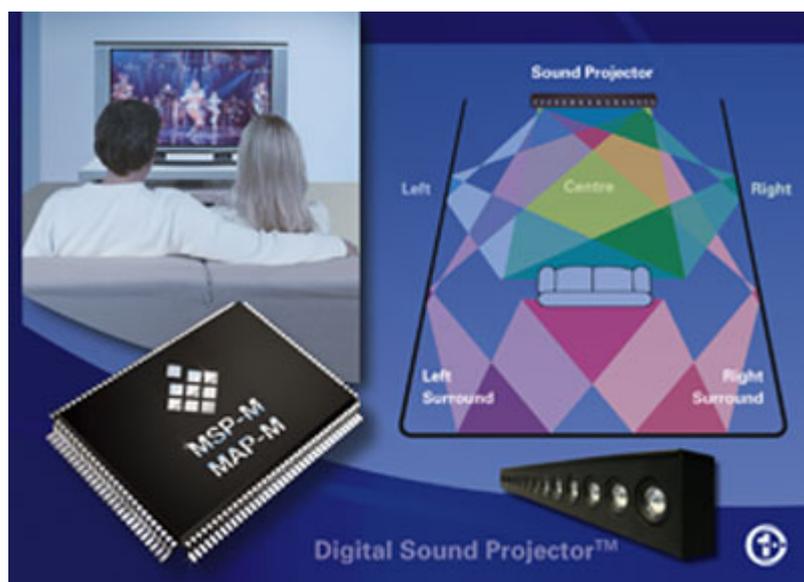
- Bluetooth 2.0+EDR Class 1 and Class 2 Modules (WT11 & WT12)
- Range up to 200m (Class 1 - WT11) and 30m (Class 2 - WT12)
- Integrated chip antenna or U.FL connector
- Enhanced Data Rates (EDR) up to 2-3Mbps
- Low power consumption
- Support for Adaptive Frequency Hopping (AFH) and 802.11 co-existence
- USB version 2.0 & UART with bypass mode
- 8Mbits of Flash memory
- Supported Bluetooth profiles: SPP, DUN, OBEX, Hands Free Profile, Audio Gateway and HCI
- Simple iWRAP firmware for controlling Bluetooth wireless technology
- Support for custom applications
- Industrial temperature range from -40C to +85C
- RoHS compliant
- Fully qualified end product with Bluetooth 2.0+EDR, CE and FCC



Micronas and 1 Ltd unveil Digital Sound Projector turnkey solution

Home theatre solution uses unique software in combination with a unique IC platform to deliver surround-sound from a single speaker

Micronas, available from [GLYN High-Tech Distribution](#), and 1 Ltd recently announced the availability of a turnkey solution in software and hardware that for the first time provides the functionality of Digital Sound Projector™ fully integrated in a consumer audio system-on-chip at lowest cost. Digital Sound Projector technology produces real surround-sound without the need for multiple loudspeaker enclosures and wiring. The complete solution



gives TV and home-audio manufacturers a pre-engineered platform that enables them to quickly and cost-effectively get to market with Digital Sound Projector applications.

Digital Sound Projectors comprise of a single speaker enclosure containing an array of speakers. These speakers simultaneously produce multiple beams of sound, which are individually steered and projected within the room. The walls

and ceiling are then used to reflect these beams producing real surround-sound for the TV viewer. The technology provides a complete surround-sound solution, which replaces an amplifier, unsightly cables and multiple speaker boxes.

Furthermore, the flexibility of the sound beams allows TV viewers to simultaneously watch different programmes being shown on a split screen – without using headphones. Called Beam2Me®, this function collapses each programmes surround sound into a mono beam which is then beamed directly at each viewer. Beam2Me can also send the audio beam from one room to another using wall reflections and door openings, features unavailable from other surround systems.

Digital Sound Projector technology is implemented in the firmware of the QuadMAU® audio DSP in Micronas' MAP-M and MSP-M family of audio processors. Both product families offer Micronas' Customizable Modular Processing (CMP) capability, which provides CE manufacturers with nearly unlimited flexibility and maximum product differentiation.

While the MSP-M is designed for televisions receiving analog and digital broadcasts, the MAP-M is optimized for televisions focusing on digital TV as well as for home-audio applications such as integrated audio systems or Home-Theater-in-a-Box (HTiB). MSP-M and MAP-M provide multiple interfaces such as S/PDIF and I2S for digital audio, line I/O and phono- and microphone-inputs for analog signals.

The realistic playback of surround-sound with a single loudspeaker-unit is one of the hottest topics in the TV-audio and home-audio market, driven by movie soundtracks being available to everyone on DVD and digital TV. To address this rapidly growing market, the two companies have combined their flagship products creating an easy-to-adopt solution.

The basic software of the Micronas QuadMAU DSP provides complete audio decoding as well as equalization, balance, and tone control functions. The 1 Ltd technology programmed into the audio processors creates the sound beams for Digital Sound

Projection and Beam2Me® functionality. Additional software sets up all these features automatically. The combined technologies enable OEMs to quickly develop a full-featured and cost-effective TV- or home-audio Sound Projector system with all required audio functions.

"We are delighted to offer 1 Ltd's advanced Digital Sound Projector technology in our IC family" said Stefan Hepp, director marketing Consumer Audio at Micronas. "Micronas has offered intelligent surround-sound solutions for several years. Now we can offer a breakthrough in system partitioning and cost with the Digital Sound Projector technology on our chip platform. We believe this combination will meet a strong need in the market."

"Implementing Digital Sound Projector IP into the leading range of Micronas SoC audio processors is the first step in gaining mass consumer take-up of the technology. Consumers will be able to purchase FPTV's with an integrated Digital Sound Projector exploiting its advanced beaming features whilst taking advantage of a real surround-sound system without the clutter of separate speakers and cables." said Steve Collicott, Business Development Manager of 1 Ltd. "unlike psycho-acoustic offerings, the Micronas solutions allow all of the audio channels to be heard, even when moving around the room".



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