

# Microchip Technology Introduces OEM-Compliant, Automotive-Certified LIN/SAE J2602 Transceivers

## MCP202X Transceivers Meet the Stringent Requirements of European, Asian and North American Automotive Manufacturers

CHANDLER, Ariz .-- (BUSINESS WIRE)--

Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the MCP2021 and MCP2022 (MCP202X) LIN/SAE J2602 transceivers. The new devices are 3rd party-LIN/J2602 approved, OEM approved, and AEC-Q100 certified to meet the stringent requirements of global automotive manufacturers worldwide. The transceivers include built-in voltage regulators and are compliant with the LIN Bus 2.0/2.1 and SAE J2602 standards, as well as the previous-generation LIN 1.X standards.

The market momentum for LIN remains strong in all major product areas. According to the research firm Strategy Analytics(a), LIN represents the second largest market segment in networked automotive applications, in terms of number of nodes. The MCP202X family represents Microchip's second generation of LIN/SAE J2602, following the Company's previous-generation MCP201 family.

With their built-in voltage regulator, the MCP202X transceivers reduce the number of external components needed, which increases system reliability and reduces overall design size. The transceivers' proven robustness and world-class ESD performance enable reliable communication in even harsh environments, with minimal or no external components required. Additionally, the devices' industry-leading low emissions eliminates the need for external shielding, which is of particular interest to noise-sensitive systems such as car radios, in-car entertainment systems, GPS navigation, mirrors, steering-wheel control and garage-door openers. Low power consumption in operational and standby modes (115 and 16 micro Amperes, respectively) makes the MCP202X transceivers suitable for non ignition-switched applications, and helps to extend battery life.

"The MCP202X transceivers' proven robustness meets automotive manufacturers' needs for reliable, cost-effective in-vehicle communication," said Bryan Liddiard, vice president of marketing with Microchip Technology's Analog & Interface Products Division. "The transceivers' robustness, ESD performance and low power consumption, when combined with a microcontroller or digital signal controller, provide designers with maximum flexibility to incorporate new LIN/SAE J2602 features into their designs, in response to market requirements."

Development Tool Support

The following table summarizes the development tools available to help designers get started with the MCP202X transceivers. All of these tools can be ordered today, at microchipDIRECT (<u>www.microchipdirect.com</u>).

Tool Name	Part #	Description	Price
PICDEM(TM) CAN-LIN 3 Demonstration Board	DM163015	Enables users to demonstrate a LIN network using the Microchip's 8- bit PIC18F6680/8680 microcontrollers	\$199.99
ECAN(TM)/LIN PICtail(TM) Plus Daughter Board	AC164130	Works with Microchip's Explorer 16 Development Board, and its 16-bit dsPIC33 digital signal controllers and PIC24H microcontrollers	\$45.00
LIN Serial Analyzer	APGDT001	Enables designers to connect a LIN bus to a PC	\$64.95

#### Applications

The MCP202X transceivers are appropriate for a wide range of applications in the automotive market, including rain sensors, sunroofs, window lift, seat-position motors, seat-control switches, radios, entertainment systems, GPS navigation, mobile telephone equipment, mirrors, steering-wheel control, compasses and garage-door openers. The devices are also appropriate for applications in the industrial (e.g. large lawn mowers, golf carts, metering and door locks); medical (e.g. motors and control panels on wheel chairs and hospital beds); and appliance markets (e.g. washing machine and stove control panels and sensors).

#### Device Packaging, Pricing & Availability

The MCP2021 transceiver is available in 8-pin SOIC, PDIP and 4 mm x 4 mm DFN packages, for \$0.90 each in 10,000-unit quantities. The MCP2022 transceiver is available in 14-pin SOIC, TSSOP and PDIP packages, for \$1.02 each in 10,000-unit quantities. Samples are available at <a href="http://sample.microchip.com">http://sample.microchip.com</a>, today; and volume-production quantities of the transceivers can be purchased today at <a href="http://www.microchipdirect.com">www.microchipdirect.com</a>.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <u>www.microchip.com/LIN</u>.

#### Microchip Customer Support

Microchip is committed to supporting its customers by helping design engineers develop products faster and more efficiently. Customers can access four main service areas at <u>www.microchip.com</u>. The Support area provides a fast way to get questions answered; the Sample area offers free evaluation samples of any Microchip device; microchipDIRECT provides 24-hour pricing, ordering, inventory and credit for convenient purchasing of all Microchip devices and development tools; finally, the Training area educates customers through webinars, sign-ups for local seminar and workshop courses, and information about the annual MASTERs events held throughout the world.

### About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at <u>www.microchip.com</u>.

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Photo and Block Diagram available through editorial contact

(a) Source: Mak, Kevin K. Automotive Multiplexing Protocols: Cost/Performance Driving New Protocol Adoption. Strategy Analytics Automotive Electronics Service. Published November 2007 in the UK.

Source: Microchip Technology Inc.