



Analog Solutions—
Robust, Reliable
Performance

Advanced Analog Products for Automotive and Industrial Markets

Category	Device	Description	Automotive*	Industrial*
Connectivity	TJA1057GT / TJA1044GT	12 V family of basic / standby CAN FD transceivers with optional 3.3 V Vio pin, offering best in class EMC performance (Common Mode Choke useless up to 500 kbps) and available in SO8 and HVSON8 packages	X	X
	TJA1046TK	12 V dual standby CAN FD transceivers with optional 3.3 V Vio pin, offering best in class EMC performance and available in leadless HVSON14 package	X	
	TJA1051 / TJA1042	12 V / 24 V family of basic / standby CAN FD transceivers with optional 3.3 V Vio pin, supporting CAN FD data rates up to 5 Mbps and available in SO8 and HVSON8 packages	X	X
	TJA1059	12 V / 24 V dual standby HS CAN transceivers including 3.3 V Vio pin and available in leadless HVSON14 package	X	
	TJA1043	12 V / 24 V sleep mode CAN FD transceivers including 3.3 V Vio pin. Supporting CAN FD data rates up to 5 Mbps and available in SO14 and HVSON14 packages	X	
	TJA1145	HS-CAN transceiver supporting CAN FD data rates up to 2 Mbps, including Partial Networking Sleep Mode and available in SO14 and HVSON14 packages	X	
	TJA1052i	HS-CAN transceiver supporting CAN FD data rates up to 5 Mbps with integrated galvanic isolation for high voltage applications	X	
	TJF1052i	HS-CAN transceiver supporting data rates up to 5 Mbps with integrated galvanic isolation for high voltage applications		X
	TJA1021 / 27 / 29 TJA1022 / 24	Single and multi LIN 2.x/SAE J2602 compliant LIN transceivers available in several package options	X	X
	TJA1100	100 Mbps Open-Alliance BroadR-Reach Ethernet PHY over unshielded twisted pair cable	X	X
	SJA1105 / T	5-port 10/100/1000 Mbps data rates Ethernet switch with AVB and TSN support	X	X
	MC33664	2 Mbps isolated network high-speed transceiver with dual SPI architecture to conveniently interface a microcontroller up to 15-node system with Battery Cell Controller devices MC33771 / MC33772	X	
	MC33978 MC33CD1030	36 V analog switch interface multiplexer: translates up to 33 I/Os onto a single MCU SPI bus with very low quiescent current, configurable wetting currents (from 2 mA to 20 mA), integrated temperature & supply sensors	X	X
	MC34CM3120	32 V dual IO-Link master transceiver with embedded frame handler, SPI communication, protection mechanisms (OC, OT, OV) 7x7mm QFN package		X
MC34CM3010	36 V IO-Link single device transceiver with embedded frame handler, SPI communication, integrated supplies for MCU and sensor/ 4x4 mmm QFN /2x2.5 mm CSP packages		X	
OL2385	Sub-GHz transceiver system-on-chip radio solution with pre-loaded modem solution supporting SigFox protocol		X	
Battery Management	MC33771 MC33772	3 to 14-cell Li-Ion Battery Cell Controller compatible for 5 V up to 1000 V packs with 2 Mbps transformer coupled daisy chain transceivers, 300 mA passive cell balancing and shunt current sensor	X	
	MM912_637 MM921_638	16-bit integrated MCU with 3 x 16-bit ADC for precision lead acid and Li-Ion battery monitoring solutions with low system power consumption for mission-critical applications up to 52 V and higher voltage battery pack monitoring	X	
	MC34671 / 3 MC34674 / 5	Scalable high input voltage linear chargers for single cell Li-Ion and Li-Polymer batteries up to 1.2 A charge current with constant voltage accuracy down to 0.4% and constant current accuracy down to 5% available into a small 8-lead 2 mm x 3 mm x 0.65 mm UDFN thermally enhanced package		X
	MC32BC3770	2.0 A switch-mode charger with intelligent power-path for 1-cell Li-Ion and Li-Polymer battery		Consumer version

ANALOG PORTFOLIO SUMMARY FOR INDUSTRIAL & AUTOMOTIVE MARKETS

Category	Device	Description	Automotive*	Industrial*
System Power Management	TJA1028	LIN mini SBC in an SO8 or HVSON8 package with a LIN 2.x/SAE J2602 compliant LIN transceiver and a 5 V or 3 V3 LDO with 70 mA output current capability	X	X
	UJA116x UJA1169	Mini SBC product family with 5 V/100 mA LDO with integrated HS-CAN with support for CAN FD up to 2 Mbps, housed in very small HVSON package. Integrated SPI interface and watchdog. Versions available with partial networking and CAN FD passive support.	X	
	UJA107xA MC33903 / 4 / 5	Mid-range SBC product family including versions with 1 HS-CAN or 1 HS-CAN & 1/2 LIN. Integrated 3.3 V / 5 V LDO up to 400 mA with external PNP for thermal distribution. Integrated SPI interface and watchdog function and local wake inputs	X	
	UJA113x MC33909	High power SMPS-based SBC product family with buck-only or buck-boost versions, housed in QFP48 package. Output voltage 3.3 V / 5 V up to 500 mA and integrated Vaux sensor supply. Integrated HS-CAN with CAN FD 2 Mbps support and up to 4 LIN. Versions available with partial networking and CAN FD passive support	X	
	MC33FS45xx MC33FS65xx	36 V System Basis Chip with energy-efficient DC/DC power conversion up to 2.2 A (2.0 A on Vpre) and low-voltage operation with configurable advanced fail silent behavior, long duration timer, keep alive memory supply and optional integrated CAN FD transceiver	X	
	MMPF0100 MMPF0200	Quick-turn programmable 14-channel, 11.7 A (13-channel and 7.5 A for MMPF0200) system power management solutions with fully configurable voltages, sequencing and timings optimized for use with i.MX 6 series applications processors	X	X (+ consumer)
	MC33PF3000 MC33PF3001	Optimized quick-turn programmable 12-channel, 7.3 A system power management solutions with fully configurable voltages, sequencing and timings optimized for use with i.MX 7 and i.MX 6 series applications processors available in a 7x7 mm package	X	X(+ consumer)
	MC34VR500 MC34VR5100	9-channel power management IC, optimized to work with Layerscape network processor systems (LS1021A, LS2024A, LS1043A, LS1046/47A, LS1012A) with custom pre-programmed output voltages, sequencing, and timings and available in a 7x7 mm QFN package		X
Smart High Side Switches	MC33981	High current and high frequency 30 A / 27 V, 60 kHz, 4 mΩ high side switch with protected half bridge configuration enabling up to a 25% board area reduction and module simplification	X	X
	MC33982 / 4 / 8	Self-protected multipurpose single 2 mΩ, dual 4 mΩ or 8 mΩ low R _{DS(on)} SPI-driven high side switches for flexible load management from 7 A to 30 A	X	X
	MC24XS4	Scalable, programmable family of 24 A / 36 V SPI-driven, dual-channel, smart high-side switches from 6-to-50 mΩ R _{DS(on)} for up to a 30% board reduction, and optimum for dense high-current switching applications	X	X
	MC12XS6	Scalable family of 22 A / 18 V programmable penta, quad and triple high-side switches from 7-to-40 mΩ R _{DS(on)} with wide range diagnostic current sensing for up to 30% smaller PCB and 50% lower component count	X	X
Smart Low Side Switches	MC33882	Smart 6-output low-side switches able to control loads up to 1.0 A, daisy chainable SPI and parallel inputs control with PWM capability on all outputs	X	
	MC33880 MC33879	Configurable 8-output serial switches for load control up to 2.0 A with SPI, up to 2 direct control outputs for PWM applications and very low standby current, including monitoring and protection features	X	
	MC33996 MC33999	16-output low-side switches able to control loads up to 2.5 A, daisy chainable SPI with or without parallel inputs mode for PWM capability on all outputs	X	
Valve Drivers	MC33SB0400 MC33SB0401	One wheel / two wheel motorcycle ABS integrated device allowing heatsink removal	X	
	MC34SB0800 MC34SB0410	Fully integrated octal, quad valves and pump controller system on chip solutions with SPI, PWM up to 5 kHz (5.0 A), real-time valve current regulation (2.25 A – 2% precision w/ calibration) and integrated safe MOSFET for switching off all valves at once in case of emergency		X
Power Drivers	MPC17510 / 29 MPC17531 / 33 MPC17C724 MC34933	Low operating voltage (2 V to 15 V) monolithic single and dual H-Bridge for portable applications designed with low quiescent, integrated protection and diagnostics, 1 A output drive and PWM control input frequency up to 200 kHz capabilities		X
	MC33931S MC33932S	Medium operating voltage (5 V to 36 V) monolithic single and dual 5A H-Bridge power ICs designed for harsh environments with selectable slew rate control, PWM up to 20 kHz, integrated protection and diagnostics in a thermally enhanced package	X	X
	MC33HB2000 MC33HB2001	3.0 A H-Bridge motor driver (5 V to 28 V) with SPI control for increased flexibility (current limits & slew rates configurable), low R _{DS(on)} outputs (235 mΩ or 120 mΩ), PWM up to 35 kHz, daisy chainable, real time current mirror and available in 32-lead SOIC and PQFN packages	X	
Gate Drivers	MC33937 MC33GD3000	3-phase high current FET pre-driver (>1 A) with extended voltage range (6 V to 58 V), PWM (> 20kHz), robust fault-monitoring and failure protection for industrial brushless DC motor control (BLDC)	X	X
	MC33883	H-Bridge gate driver with charge pump, independent high and low side gate driver channels, PWM up to 100 kHz and up to 1.0 A peak gate driver current	X	
Small Engine Controllers	MM912_812 MC33812 MC33813 / 4	Small engine electronic fuel injection controller with diagnostics in order to meet air pollution emissions and fuel consumption for environmental legislation Euro 3 and Euro 4 for up to 2-cylinder and Euro 5 & OBDII for 1-cylinder (2 O2 heater pre-driver)	X	

