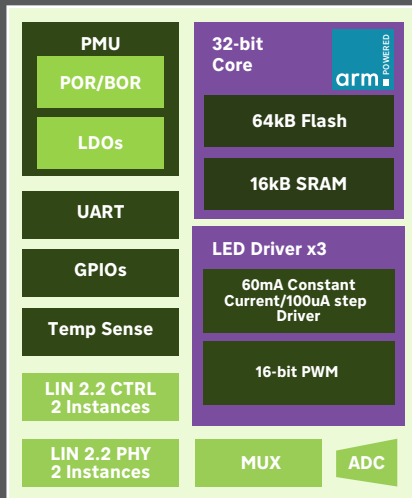


iND832xx Family

Three-Way RGB LED Driver ICs

iND832xx Features

- 3x LED drivers
- 32-bit Arm® Cortex® M0 Processor
- 64kB Flash / 16kB SRAM
- Integrated internal LDO
- 3x 60mA high brightness configurable LED drivers with 100 uA steps
- 3x 16-bit PWM controllers
- Up 6 GPIOs
- 10-bit ADC
- UART Interface
- Dual LIN 2.2 J2602 interface
- Optimized for Automotive applications



Applications

- Automotive interior lighting
- Consumer lighting products
- Industrial Lighting

The iND832xx family consists of two automotive-grade LED-lighting ICs that integrate a powerful 32-bit Arm® Cortex® M0 processor together with everything necessary to implement an interior lighting system. The ICs include a flexible power management system and 3x open-drain LED I/O drivers running at up to VBAT with programmable current and 16-bit PWM, plus specific monitoring features and external interfaces. The iND832xx Pro Family is designed to be connected directly to the automotive supply and can withstand a 45V load dump from the car battery.

The devices contain 64kB of Flash and 16kB of SRAM integrated on die.

The integrated power management unit implements two on-chip voltage regulators with only one of them requiring an external capacitor.

The 3x LED drivers each offer a maximum of 60 mA constant current with 100uA steps at high voltage (up to VBAT). An integrated temperature sensor ensures the chip does not exceed its specifications.

The main difference between the two devices are the GPIOs (up to six) in the iND83209 that enable time-multiplexing to increase the number of driven RGB LEDs when combined with the 3x high-voltage open-drain IOs used for driving the LEDs. iND83212 removes the GPIOs making it ideal for lower-cost applications that don't require the flexibility of additional multiplexed channels. There are two LIN version 2.2 transceivers and controllers, and an integrated 10-bit ADC for monitoring purposes.

iND832xx family comes in a low cost, 4x4mm 20-pin QFN package and is suitable for applications from -40C to +125C.

Ordering Information

Device Name	GPIO	Platform	Temp Range	Package	Pins
iND83209	6	Automotive	-40C to +125C	4x4 mm QFN	20 Pins @ 0.5 mm Pitch
iND83212	None	Automotive	-40C to +125C	4x4 mm QFN	20 Pins @ 0.5 mm Pitch