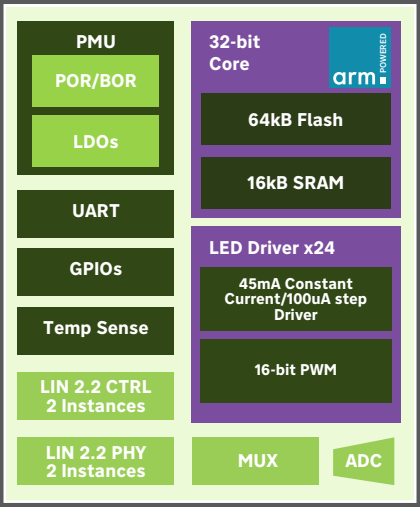
iND83210

24-way RGB(W) LED Driver

iND83210 Features

- 24x LED drivers
- 32-bit Arm® Cortex® M0 Processor
- 64kB Flash / 16kB SRAM
- Integrated regulators
- 24x 45mA configurable LED drivers with 100uA steps
- 24x 16-bit PMW controllers
- 9 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

iND83210 is an automotive-grade LED-lighting IC that integrates a powerful 32-bit Arm® Cortex® M0 processor together with everything necessary to implement an interior lighting system. The IC includes a flexible power management system, 24x 5V programmable-current open-drain IOs with PWM, plus specific monitoring features and external interfaces. iND83210 is designed to be connected directly to the automotive supply and can withstand a 45V load dump from the car battery.

The iND83210 contains 64kB of Flash and 16kB of SRAM.

The integrated power management unit implements two on-chip voltage regulators with external capacitors. The power for the LEDs comes from an external 5V supply with the device capable of driving 8x RGB LEDs or 6x RGBW LEDs at a maximum of 45mA current with 100uA steps per LED diode. An integrated temperature sensor ensures the chip does not exceed its specifications.

iND83210 contains up to 9 GPIOs, plus the 24x 5V open-drain IO used for driving the LEDs. There are two LIN version 2.2 transceivers and controllers, a half-duplex UART, and an integrated 10-bit ADC for monitoring purposes. GPIOs are multiplexed with UART hardware for additional interface capabilities.

iND83210 is packaged in a low cost, 6x6mm 48-pin QFN package and is suitable for applications from -40C to +125C.

Ordering Information

Device Name	Platform	Temp Range	Package	Pins
iND83210	Automotive	-40C to +125C	6x6 mm QFN	48 Pins @ 0.4 mm Pitch