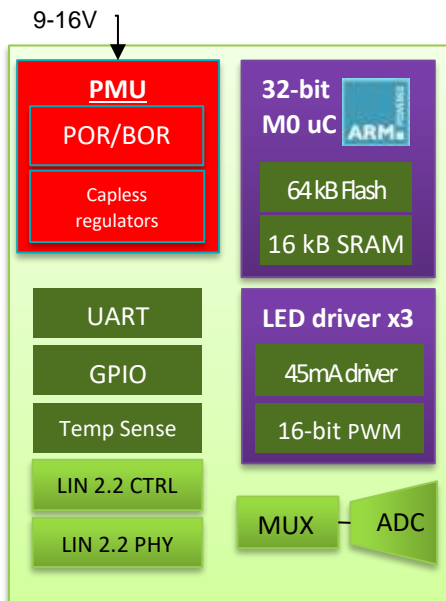


RealPlum Features

- 3x LED drivers
- ARM M0 32-Bit MCU
- 64kB Flash / 16kB SRAM
- Integrated internal LDO
- Optimized for Automotive applications
- 3x 45mA high brightness configurable LED drivers
- 3x 16-bit PWM controllers
- 6 GPIOs
- 10-bit ADC
- UART Interface
- Dual LIN 2.2 J2602 interface



Recommended Applications

- Automotive interior lighting
- Consumer lighting products

iND83205 - “RealPlum” 3-way RGB LED Driver IC

Device Description

RealPlum is an automotive LED-lighting IC that combines a highly integrated 32-bit general-purpose ARM Cortex M0 microcontroller together with everything necessary to implement an interior lighting system. The IC includes a flexible power management system and 3x open-drain LED I/O drivers running at up to VBAT with programmable current and PWM, plus specific monitoring features and external interfaces. RealPlum is designed to be connected directly to the automotive supply and can withstand 45V load dump from the car battery.

The iND83205 contains 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 45 mA constant current at high voltage (up to VBAT). An integrated temperature sensor ensures the chip does not exceed its specifications.

RealPlum contains up to 6 GPIOs, plus the 3x high-voltage open-drain IOs 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 and other interface capabilities.

RealPlum is packaged in a low cost, 4x4mm 20-pin QFN package and is suitable for applications from -40C to +85C.

Ordering Information

Device Name	Platform	Temp Range	Package	Pins
iND83205 RealPlum	Automotive	-40C to +85C	4x4 mm QFN	20 Pins @ 0.50 mm Pitch