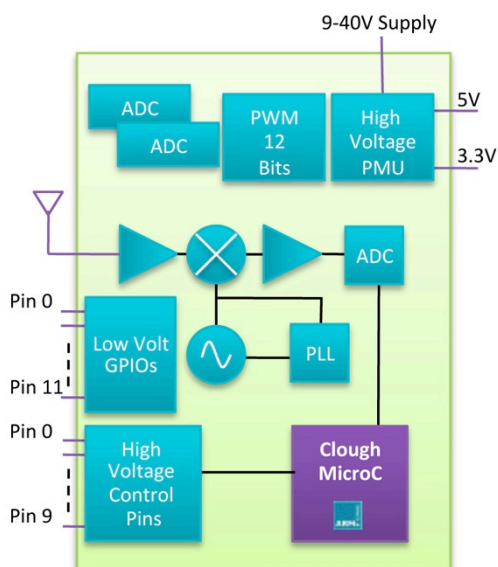


e8Sesame Features

- ARM M0 32-Bit MCU
- 160kB Flash / 8kB SRAM
- ISM 433MHz ASK Receiver
- (2) 8-1- bit ADCs
- (10) High Voltage GPIOs
- (12) Low Voltage GPIOs
- 3.3V and 1.8V regulated outputs
- 10MHz RC Oscillator
- 3.579545MHz XTAL Oscillator
- 10kHz Auxiliary Clock (<1uA)
- (3) 32-bit Timers
- (1) 12-bit PWM

Recommended Applications

- Garage door openers
- Automotive alarms
- Wireless industrial door and security systems



iND83222 - “e8Sesame”

32-Bit ARM M0 uController and Wireless Transmitter

Device Description

e8Sesame is part of indie’s HV/Automotive series of ARM M0-based microcontrollers. Clocking at up to 20MHz, the ARM M0 core integrates 160kB of flash RAM and 8kB of SRAM on die. It also integrates a superheterodyne ISM-band ASK receiver operating at 433MHz and with sensitivity performance of -110dBm. It is intended to support a wide array of applications including garage door openers and radio controlled industrial door and security systems as well as automotive alarm systems.

The iND83222 integrates multiple clocking options including a high accuracy (1%) 10MHz RC oscillator, low cost 3.58MHz XTAL oscillator, and low power (<1uA) 10kHz auxiliary clock. It also contains (3) 32-bit timers, and a watchdog timer for high performance, low power designs.

e8Sesame also integrates multiple types of GPIOs. There are 6 high voltage (9-45V) GPIOs which can source 5mA or sink 25mA of current, 4 high voltage (9-45V) GPIOs which can sink 200mA in order to drive a relay coil and 12 low voltage (3.3V nominal) GPIOs.

iND83222 also has a 12-bit PWM output and (2) 8-10 bit ADCs (SAR architecture) with 28 channels.

e8Sesame integrates a power management block including on-chip regulators and can be powered from a wide voltage range of 9V to 45V. The on-chip power management also produces regulated 1.8V and 3.3V supplies to external pins. All the iND83222 pins are 8kV Latch-up resistant.

All of these features are packaged in a low cost, 7x7mm 48 pin QFN package and are suitable for applications from -40C to +85C.

Ordering Information

Device Ordering Name	Platform	Temp Range	Package	Pins
iND83222 e8Sesame	General purpose microcontroller applications	-40C to +85C	7x7 mm QFN	48 Pins @ 0.50 mm Pitch