

# CNS1202

(High Efficiency Synchronous Boost Converter With Dual Independent 2A Current Sources)

## 1 Features

- Dual Independent and Programmable 2A LED Current Source
- Flash: 3.91mA~2.0A, 256 levels 7.83mA/level
- Torch: 0.98mA~500mA, 256 levels 1.96mA/level
- Flash Timeout: 40ms~1.6s, 16 levels
- Flash/Torch/IR Mode
- Up to 85% Flash Efficiency
- Optimized Flash LED Current During Low Battery Conditions (IVFM)
- Hardware Flash/Torch Enable (STROBE/TORCH)
- Synchronization Input for RF Power Amplifier Pulse Events (TX)
- 400kHz I2C: CNS1202 (I2C Address=0x63)
- 0.4mm Pitch, FCQFN-10L Package

## 2 Applications

- Smartphone Camera Flash

## 3 DESCRIPTION

The CNS1202 is a dual LED flash driver that provides a high level of adjustability within a small solution size. The CNS1202 utilizes a 2MHz or 4MHz fixed-frequency synchronous boost converter to provide power to the dual 2A constant current LED sources. The dual 256 levels current sources provide the flexibility to adjust the current of LED1 and LED2 in Flash/Torch/IR modes. The CNS1202 provides IVFM protection to prevent system reset or shutdown under low battery condition.

### Simplified Schematic

