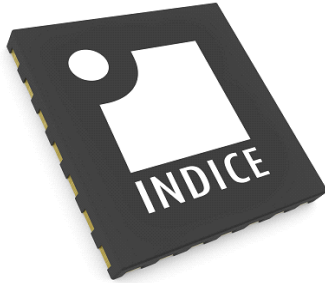




G3 Premium Dimming MR16 LED Driver IC

Product Number: IN0312



Description

Indice's next generation "G3" MR16 Driver IC is a true low voltage retrofit lighting solution. Integrate the IN0312 IC into your LED retrofit lamps to take advantage of features such as Inductor-less current regulation (ICR), Active Temperature Management, deep dimming and extraordinarily high compatibility with current dimmers and transformers. ICR allows for smooth flicker free operation with normally difficult transformer and dimmer combinations.

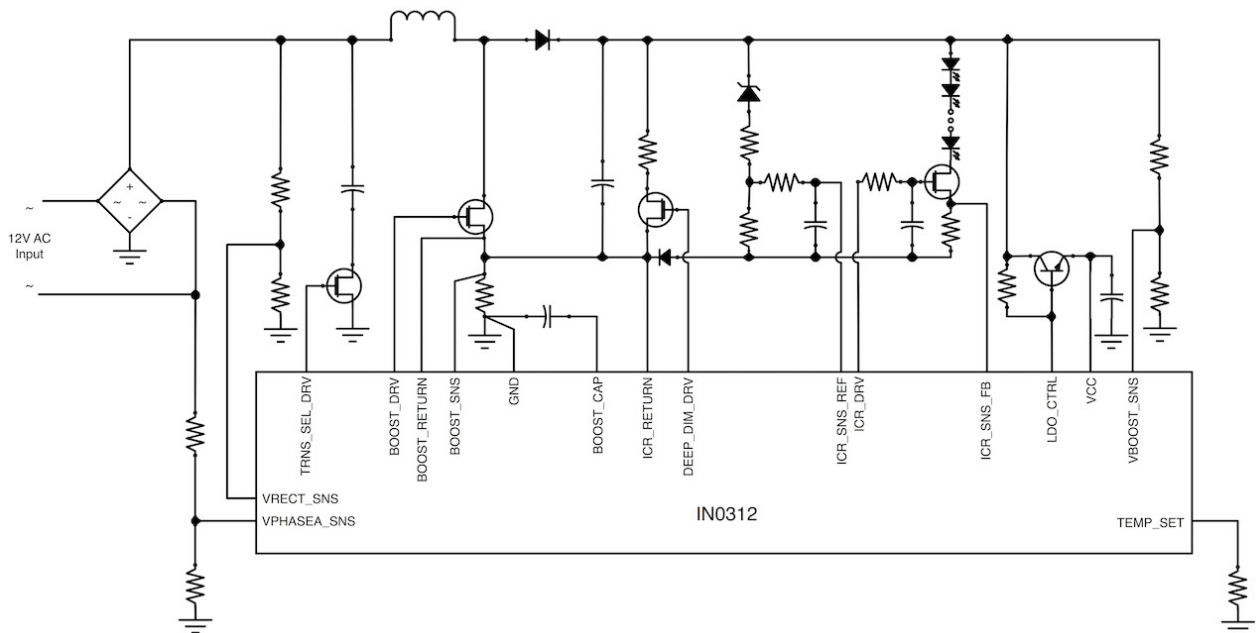
Features

- Flicker free dimming with Inductor-less current regulation (ICR)
- Incredibly high power density
- Deep dimming – down to 0% light
- Active Temperature Management
- Lower part count than advanced drivers
- Ultra small form factor – fits inside the wedge of a ANSI halogen lamp
- Up to 20W applications

Applications

- MR16 retrofit lamps
- AR111 retrofit lamps
- Low voltage outdoor lighting (12VAC)
- Marine and automotive LED lighting

Functional Block Diagram





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Specifications

| | |
|---|---|
| Target power | Up to 20W |
| Input voltage | 12VAC / 12VDC |
| LED voltage range | 18V – 36V |
| Deep dimming | Yes: 100 – 0% light |
| Inductor-less current regulation | Yes |
| Leading and trailing edge dimming | Yes |
| Electronic transformer compatible | Yes |
| Topology | Boost |
| Active Temperature Management | Yes |
| Driver efficiency | Up to 75% (Depending on transformer used) |
| Switching frequency | Up to 4MHz asynchronous |
| Power factor on electronic transformer | >0.9 (dependent on transformer) |
| EMC compliance on transformers | CISPR15 / FCC |

Feature and package options

| IC Order Number | Package | Features |
|-----------------|---------|---|
| IN0312 | QFN20 | <ul style="list-style-type: none">• Inductor-less current regulation• Ultra high transformer compatibility• Dimming on leading and trailing edge dimmers• Boost topology• Deep dimming• Active Temperature Management• Power normalization keeps light level consistent across transformers |

Note: Specifications are subject to change. For up-to-date product information, please visit www.indicesemi.com.