

## AC/DC ISOLATED | LED LIGHTING

## Controllers

| Part Number | V <sub>IN</sub> (Min) (V) | V <sub>IN</sub> (Max) (V) | Power (W) | Control Method       | Package                   | Notes                                                                                                                              |
|-------------|---------------------------|---------------------------|-----------|----------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| MP4026      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOT23-6                   | Primary-Side Control Offline, Active PFC                                                                                           |
| MP4027      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOT23-8                   | Primary-Side Control Offline, PFC, NTC, and PWM Dimming                                                                            |
| MP4030A     | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8                     | TRIAC Dimmable, Primary-Side Control, Offline, Active PFC<br>Recommend MP4033 for Trailing Edge Dimmers                            |
| MP4031      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8                     | TRIAC and Analog Dimmable, Deep Dimming, Primary-Side Control, Offline, Active PFC                                                 |
| MP4033      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8<br>MSOP10<br>SOIC14 | Enhanced TRIAC-Dimmable, Primary-Side Control, Offline, Active PFC                                                                 |
| HR1001A     | 85AC                      | 305AC                     | Ext. FET  | Resonant             | SOIC16                    | Resonant Half-Bridge, Variable Frequency, High-Power Application, Auto-Restart at Over-Current, for Street Lighting Application    |
| HR1001B     | 85AC                      | 305AC                     | Ext. FET  | Resonant             | SOIC16                    | Resonant Half-Bridge, Variable Frequency, Noise-Proof Enhanced, High-Power Application, Two Level OCP                              |
| MP44010     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8<br>DIP8             | Offline PFC, Boundary Conduction, Ultra-Low Start-Up Current (15µA)                                                                |
| MP44011     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8                     | Offline PFC, Boundary Conduction, Harmonic Injection Function<br>(Reduced Capacitor Value and Inductor Size Compared with MP44010) |
| MP44014     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8                     | Offline PFC, Boundary Conduction (BOM to BOM with L6562A)                                                                          |

## Regulators

| Part Number | V <sub>IN</sub> (Min) (V) | V <sub>IN</sub> (Max) (V) | Power (W) | Control Method | Package                   | Notes                                                                                        |
|-------------|---------------------------|---------------------------|-----------|----------------|---------------------------|----------------------------------------------------------------------------------------------|
| MP4032-1    | 85AC                      | 265AC                     | 7         | Flyback        | SOIC8-7A                  | Integrated 500V FET, TRIAC Dimmable, Deep Dimming, Primary-Side Control, Offline, Active PFC |
| MP4034      | 85AC                      | 305AC                     | 7         | Flyback        | SOIC8<br>MSOP10<br>SOIC14 | Integrated 700V FET, Primary-Side Control, Offline, No Dimming or PFC                        |

## AC/DC NON-ISOLATED | LED LIGHTING

## Controllers

|            | Part Number | V <sub>IN</sub> (Min) (V) | V <sub>IN</sub> (Max) (V) | Power (W) | Control Method | Package                   | Notes                                                                       |
|------------|-------------|---------------------------|---------------------------|-----------|----------------|---------------------------|-----------------------------------------------------------------------------|
|            | MP4000      | 85AC                      | 305AC                     | Ext. FET  | Low-Side Buck  | SOIC8                     | WLED Driver Controller for Low Cost LED Lamps, Analog and PWM Dimming       |
|            | MP4001      | 85AC                      | 305AC                     | Ext. FET  | Low-Side Buck  | SOIC8                     | Offline LED Controller, Integrated High-Voltage LDO, Analog and PWM Dimming |
|            | MP4054      | 85AC                      | 305AC                     | Ext. FET  | Buck-Boost     | SOT23-8                   | Offline LED Controller, Active PFC                                          |
|            | MP4054A     | 85AC                      | 305AC                     | Ext. FET  | Buck-Boost     | SOT23-8                   | Offline LED Controller, Active PFC, NTC, PWM Dimming                        |
| <b>New</b> | MP4056      | 85AC                      | 305AC                     | Ext. FET  | Buck-Boost     | SOIC8<br>MSOP10<br>SOIC14 | TRIAC Dimmable, Offline LED Controller, Active PFC                          |
| <b>New</b> | MP4060      | 85AC                      | 305AC                     | Ext. FET  | Buck-Boost     | SOIC8<br>MSOP10<br>SOIC14 | Improved Trailing Edge Dimmer Performance at High Line than MP4056          |

## Regulators

|            | Part Number | V <sub>IN</sub> (Min) (V)          | V <sub>IN</sub> (Max) (V)          | Power (W) | Control Method  | Package                         | Notes                                                                              |
|------------|-------------|------------------------------------|------------------------------------|-----------|-----------------|---------------------------------|------------------------------------------------------------------------------------|
|            | MP4050A     | 85AC                               | 265AC                              | 8         | Buck            | SOIC8<br>SOT23-5                | Integrated 500V FET, Offline Driver, Enhanced Thermal, No PFC or Dimming, Low Cost |
| <b>New</b> | MP4068      | 85AC                               | 305AC<br>(recommend low line only) | 10        | Buck/Buck-Boost | SOIC8-7A<br>SOIC8EP             | Integrated 700V FET, PFC Driver with TRIAC Dimming                                 |
| <b>New</b> | MP4088      | 85AC<br>(recommend high line only) | 305AC                              | 8.5       | Buck/Buck-Boost | SOIC8-7A<br>SOIC8EP<br>TSOT23-5 | Integrated 700V FET, PFC Driver with TRIAC Dimming                                 |

## DC/DC LIGHTING | LED LIGHTING

### Regulators

|            | Part Number | V <sub>IN</sub> (Min) (V) | V <sub>IN</sub> (Max) (V) | Control Method  | I <sub>OUT</sub> (Typ) (Max) (A) | Max Efficiency (%) | Typ. Frequency | Package                          | Notes                                                                    |
|------------|-------------|---------------------------|---------------------------|-----------------|----------------------------------|--------------------|----------------|----------------------------------|--------------------------------------------------------------------------|
|            | MP3412      | 0.8                       | 4.4                       | Boost           | 1.1                              | 96                 | 1MHz           | TSOT23-6                         | Synchronous Boost, No Dimming                                            |
|            | MP2480      | 5                         | 36                        | Buck            | 3                                | 95                 | 2MHz           | SOIC8E                           | Hysteretic Control, PWM Dimming                                          |
|            | MP2481      | 4.5                       | 36                        | Buck/Buck-Boost | 1.2                              | 95                 | 1.4MHz         | MSOP8                            | Analog and PWM Dimming                                                   |
|            | MP24892     | 6                         | 45                        | Low-Side Buck   | 1                                | 95                 | 600kHz         | TSOT23-5                         | Hysteretic Control, Analog and PWM Dimming, Lower Cost Version of MP2489 |
|            | MP24893     | 6                         | 36                        | Low-Side Buck   | 1                                | 95                 | 600kHz         | QFN6 (3x3)<br>TSOT23-5           | Hysteretic Control, Analog and PWM Dimming, Lower Cost Version of MP2489 |
|            | MP2483      | 4.5                       | 55                        | Buck/Buck-Boost | 2.5                              | 95                 | 1.35MHz        | QFN10 (3x3)<br>SOIC14            | Analog and PWM Dimming, Consumer Grade                                   |
|            | MP24183     | 4.5                       | 55                        | Buck/Buck-Boost | 1                                | 95                 | 1.35MHz        | QFN10 (3x3)                      | Analog and PWM Dimming                                                   |
|            | MP2488      | 4.5                       | 55                        | Buck            | 2                                | 97.5               | 200kHz         | QFN10 (3x3)<br>SOIC8E            | PWM Dimming                                                              |
|            | MP2487      | 4.5                       | 55                        | Buck            | 1                                | 97.5               | 200kHz         | SOIC8E                           | PWM Dimming                                                              |
| <b>New</b> | MP24833A    | 4.5                       | 55                        | Buck/Buck-Boost | 3                                | 90                 | 210kHz         | SOIC8E                           | Analog and PWM Dimming                                                   |
|            | MP24895     | 6                         | 36                        | Low-Side Buck   | 1                                | 95                 | 600kHz         | TSOT23-5<br>QFN6                 | Hysteretic Control, PWM and Analog Dimming                               |
|            | MP24895A    | 6                         | 36                        | Low-Side Buck   |                                  |                    |                | MSOP8-EP                         | MP24895 in MSOP8-EP Package, PWM and Analog Dimming                      |
|            | MP4688      | 4.5                       | 80                        | Buck            | 1                                | 95                 | 2MHz           | SOIC8E                           | Hysteretic Control, PWM Dimming                                          |
|            | MP4689      | 4.5                       | 95                        | Buck            | 1                                | 95                 | 1MHz           | SOIC8E                           | Hysteretic Control, PWM Dimming                                          |
| <b>New</b> | MP2410      | 4.2                       | 24                        | Buck            | 2                                | 97                 | 1MHz           | TSOT23-6<br>TSOT23-8             | Synchronous Buck, Analog Dimming Only                                    |
| <b>New</b> | MP2410A     | 4.2                       | 24                        | Buck            | 2                                | 97                 | 1MHz           | TSOT23-6<br>TSOT23-8             | Synchronous Buck, Analog and PWM Dimming                                 |
|            | MP2489      | 6                         | 60                        | Low-Side Buck   | 1                                | 95                 | 600kHz         | QFN6 (3x3)<br>TSOT23-5<br>SOIC8E | Hysteretic Control                                                       |

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|-------------|---------------------------|---------------------------|-----------|----------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| MP4026      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOT23-6                   | Primary-Side Control Offline, Active PFC                                                                                           |
| MP4027      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOT23-8                   | Primary-Side Control Offline, PFC, NTC, and PWM Dimming                                                                            |
| MP4030A     | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8                     | TRIAC Dimmable, Primary-Side Control, Offline, Active PFC<br>Recommend MP4033 for Trailing Edge Dimmers                            |
| MP4031      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8                     | TRIAC and Analog Dimmable, Deep Dimming, Primary-Side Control, Offline, Active PFC                                                 |
| MP4033      | 85AC                      | 305AC                     | Ext. FET  | Flyback              | SOIC8<br>MSOP10<br>SOIC14 | Enhanced TRIAC-Dimmable, Primary-Side Control, Offline, Active PFC                                                                 |
| HR1001A     | 85AC                      | 305AC                     | Ext. FET  | Resonant             | SOIC16                    | Resonant Half-Bridge, Variable Frequency, High-Power Application, Auto-Restart at Over-Current, for Street Lighting Application    |
| HR1001B     | 85AC                      | 305AC                     | Ext. FET  | Resonant             | SOIC16                    | Resonant Half-Bridge, Variable Frequency, Noise-Proof Enhanced, High-Power Application, Two Level OCP                              |
| MP44010     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8<br>DIP8             | Offline PFC, Boundary Conduction, Ultra-Low Start-Up Current (15µA)                                                                |
| MP44011     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8                     | Offline PFC, Boundary Conduction, Harmonic Injection Function<br>(Reduced Capacitor Value and Inductor Size Compared with MP44010) |
| MP44014     | 85AC                      | 305AC                     | Ext. FET  | Boost/<br>Buck-Boost | SOIC8                     | Offline PFC, Boundary Conduction (BOM to BOM with L6562A)                                                                          |

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| MP4034      | 85AC                      | 305AC                     | 7         | Flyback        | SOIC8<br>MSOP10<br>SOIC14 | Integrated 700V FET, Primary-Side Control, Offline, No Dimming or PFC                        |