

## PWM Switching Regulators

### Features:

- Fixed or Adjustable Output Voltage with Accuracy +/- 2.5% & +/- 4%
- Output Current range from 0.25A to 3A
- Thermal Shutdown and Current Limit Protection
- Wide Range of Operation Frequency from 52kHz to 300kHz
- Minimal External Components Required
- Low Standby Current and Low Operation Voltage
- High Efficiency

### Application:

Handheld Products/PDA/Palmtop Computer/Mobile Phone, TFT LCD Panel Bias Supplies, Lithium-ion/Alkaline Cell Systems Local Boost/Buck Regulators, On-Card/Board Switching Regulator, LCD Monitor/TV, Digital Cameras, Set-Top Box

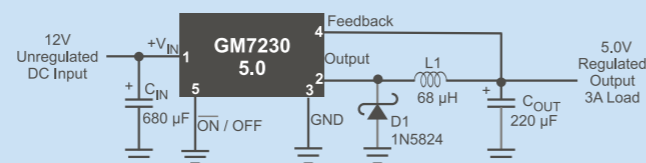
| Part No. | MAX. $V_{IN}$ (V) | $I_{OUT}$ (A) | Switch Config. | Switching Frequency (kHz) | $V_{OUT}$ Tolerance | Step Down | Step Up | Package                                 |
|----------|-------------------|---------------|----------------|---------------------------|---------------------|-----------|---------|---|
| GM7110   | 45                | 1             | Internal       | 52                        | ±4%                 | ✓         |         | TO-252-5, TO-263-5, TO-220-5, TO-220-5B |
| GM7130   | 40                | 3             | Internal       | 52                        | ±4%                 | ✓         |         | TO-263-5, TO-220-5, TO-220-5B           |
| GM7230   | 40                | 3             | Internal       | 150                       | ±4%                 | ✓         |         | TO-263-5, TO-220-5, TO-220-5B           |
| GM3255   | 30                | 1.5           | Internal       | 280                       |                     |           | ✓       | SOP-8                                   |

## GM7230 3A Step-Down Voltage Regulators

### Features

- 3.3V, 5V, 12V and Adjustable output versions
- Adjustable version output voltage range 1.23V to 37V 4% max over line and load conditions
- 3A output current
- Input voltage range up to 40V
- Requires only 4 external components
- High efficiency
- TTL shutdown capability, low power standby mode
- Thermal shutdown, current limit protection
- Uses standard inductors
- 150 kHz fixed frequency internal oscillator

Typical Application Circuit



## DC - DC Converters

### Features:

- Operation from 3.0V to 40V Input
- Output Voltage Adjustable
- Output Switch Current to 1.5A
- Current Limiting
- Low Standby Current
- Frequency Operation to 100kHz
- Precision 2% Reference

### Application:

Switching Mode Power Supply (SMPS), DVD-ROM/CD-ROM, Desktop PC, DSL Modem, Battery Charger

| Part No. | Output Current (A) | MIN. $V_{IN}$ (V) | MAX. $V_{IN}$ (V) | Switch Config. | Frequency Max (kHz) | Temp. Range | Packing      |
|----------|--------------------|-------------------|-------------------|----------------|---------------------|-------------|--------------|
| GM34063  | 1.5                | 3                 | 40                | External       | 100                 | 0°C to 70°C | DIP-8, SOP-8 |
| GM34063L | 0.8                | 3                 | 40                | External       | 180                 | 0°C to 70°C | DIP-8, SOP-8 |

## AC - DC Switching Controllers

### Features:

- Fixed-Frequency with Current-Mode
- Low Start-up Current typ 0.17mA
- Operating Range up to 500kHz
- Under Voltage Lock Out (UVLO) with Hysteresis
- High Peak Current Totem-Pole Output
- Latching PWM for cycle-by-cycle current limiting
- Trimmed Oscillator Discharge Current for Precise Duty-Cycle Control
- Pin-to-pin Compatible with UC384X

### Application:

Current Mode Off-Line SMPS, DC-DC Converter, Forward Converter, Flyback Converter, "Step-up/Buck" or "Step-down/Boost" Regulator, Synchronous FET Converter

## PWM Controllers

| Part No. | Max. $V_{IN}$ (V) | UVLO Threshold (On/ Off) | Start-Up Current (A) | Duty Cycle Max. | Frequency Max. (KHz) | Package      |
|----------|-------------------|--------------------------|----------------------|-----------------|----------------------|--------------|
| GM3842A  | 30                | 16/ 10                   | 0.17mA               | 100%            | 500                  | SOP-8, DIP-8 |
| GM3843A  | 30                | 8.4/ 7.6                 | 0.17mA               | 100%            | 500                  | SOP-8, DIP-8 |
| GM3844A  | 30                | 16/ 10                   | 0.17mA               | 50%             | 500                  | SOP-8, DIP-8 |
| GM3845A  | 30                | 8.4/ 7.6                 | 0.17mA               | 50%             | 500                  | SOP-8, DIP-8 |

## Voltage Detectors

### Features:

- Highly Accurate Voltage Detection +/- 2%
- Low Power Consumption typ 0.7µA
- Detect Voltage Range 1.6V to 6.0V at 0.1V increment
- Output Configuration: CMOS or N-Channel Open Drain
- Extremely Low Temperature Drift
- Miniature Small Package SOT-23, SOT-89

### Application:

Computer, LCD Monitor/TV, Consumer Product, High Efficiency Linear Power Supply, Post Regulator for Switch DC-DC Power Supply Controllers, Industrial Control System, Portable/Battery Powered Devices, Power-on Reset Circuits, Intelligent Instrument, Critical µC and µP Power Monitoring, Automotive

| Part No. | Detect Voltage | Accurate | $I_{SS}$ Typ. | Detect Voltage                          | Operation Voltage | Package        |
|----------|----------------|----------|---------------|---|-------------------|----------------|
| GM5510C  | 1.6 - 6.0V     | ±2%      | 0.7µA         | 1.8,2.0,2.7,2.9,3.0,3.3,3.6,4.0,4.1,4.2 | 0.7 - 10V         | SOT-23, SOT-89 |
| GM5511C  | 1.6 - 6.0V     | ±2%      | 0.7µA         | 1.8,2.0,2.7,2.9,3.0,3.3,3.6,4.0,4.1,4.2 | 0.7 - 10V         | SOT-23, SOT-89 |