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

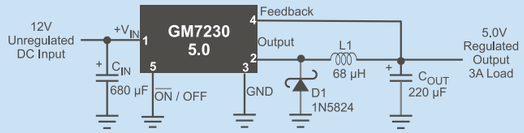
Application:
Handheld Products/PDA/Palmtop Computer/Mobile Phone, TFT LCD Panel Bias Supplies, Lithium-ion/Alkaline Cell Systems
Local Boost/Buck Regulators, On-Card/Board Switching Regulator, LCD Monitor/TV, Digital Cameras, Set-Top Box

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