

## SYNCHRONOUS STEP-DOWN (BUCK) CONVERTERS

Part No.	Input Voltage (V)	Load Current (A)	I <sub>sw</sub> Limit Typ (A)	I <sub>q</sub> Typ (mA)	I <sub>SHUTDOWN</sub> Typ (μA)	Feedback Voltage (V)	Switching Frequency	Package	Output	Notes
MP2104	2.5 – 6	0.6	1.0	0.4	0.1	0.6	1.7MHz	TSOT23-5	Adj., 1.5V & 1.8V	Internal Comp
MP2105	2.5 – 6	0.8	1.6	0.4	0.1	0.6	1.0MHz	TSOT23-5	Adj.	Internal Comp
MP2109	2.5 – 6	2 x 0.8	1.6	0.4	0.1	0.6	1.2MHz	QFN10	Adj.	Dual Output
MP2309	4.75 – 23	1.0	2.0	1.3	1.0	0.923	340kHz	SOIC8	Adj.	External Comp
MP1567	2.6 – 6	1.2	2.0	1.2	0.5	0.905	800kHz	MSOP10 / QFN10	Adj.	External Comp
MP2305	4.75 – 23	2.0	3.4	1.3	1.0	0.923	340kHz	SOIC8	Adj.	External Comp
MP2106	2.6 – 15	1.5	2.5	1.2	0.5	0.9	800kHz	MSOP10 / QFN10	Adj.	Wide Input Voltage
MP1570	4.75 – 23	3.0	5.8	1.3	0.3	1.23	340kHz	SOIC8E	Adj.	External Comp
MP2303	4.5 – 28	3.0	6.0	1.3	0.3	0.8	340kHz	SOIC8E	Adj.	External Comp
MP2307	4.75 – 23	3.0	5.8	1.3	0.3	0.920	340kHz	SOIC8E	Adj.	External Comp

## NON-SYNCHRONOUS STEP-DOWN (BUCK) CONVERTERS

Part No.	Input Voltage (V)	Load Current (A)	I <sub>sw</sub> Limit Typ (A)	I <sub>q</sub> Typ (mA)	I <sub>SHUTDOWN</sub> Typ (μA)	Feedback Voltage (V)	Switching Frequency	Package	Output	Notes
MP2351	4.75 – 23	1.5	2.8	1.0	20	1.22	1.45MHz	MSOP10 / QFN10	Adj.	Frequency Sync
MP2364	4.75 – 23	2 x 1.5	2.8	2.2	40	0.92	1.4MHz	TSSOP20E	Adj.	Dual Output
MP1591	6.5 – 32	2.0	3.6	1.0	20	1.23	330kHz	SOIC8/E	Adj.	External Comp
MP2354	4.75 – 23	2.0	3.4	1.0	23	1.22	380kHz	SOIC8	Adj.	Frequency Sync
MP2358	4.75 – 23	2.0	3.2	1.1	23	0.92	380kHz	QFN10 / SOIC8	Adj.	External Comp
MP2361	4.75 – 23	2.0	2.8	1.1	23	0.92	1.4MHz	MSOP10 / QFN10	Adj.	External Comp
MP1593	4.75 – 28	3.0	4.7	1.0	20	1.22	385kHz	SOIC8E	Adj.	External Comp
MP2355	4.75 – 23	3.0	4.3	1.0	20	1.22	380kHz	SOIC8E	Adj.	External Comp

## LOW DROPOUT, LINEAR REGULATORS

Part No.	Input Voltage (V)	V <sub>RMS</sub> (nV/√Hz)	Load Current (mA)	Load Regulation (%/mA)	I <sub>SHUTDOWN</sub> Typ (μA)	Feedback Voltage (V)	Dropout Voltage (V)	Package	Output	Notes
MP8801	2.7 – 6.5	300	150	0.001	0.1	1.22	0.100 @ 100mA	TSOT23-5	Adj., 2.5V, 2.85V & 3.3V	Low 125μA Ground Current
MP2000	1.35 - 6	300	150	0.001	7	0.5	0.250 @ 100mA	TSOT23-5	Adj., 1.0V	Low 65μA Ground Current
MP8802	2.7 – 6.5	300	250	0.001	0.1	1.22	0.250 @ 250mA	TSOT23-5	Adj., 2.5V, 2.85V & 3.3V	Low 125μA Ground Current

## STEP-UP (BOOST) CONVERTERS

Part No.	Input Voltage (V)	Output Voltage Max (V)	I <sub>sw</sub> Limit Typ (A)	I <sub>q</sub> Typ (mA)	I <sub>SHUTDOWN</sub> Typ (μA)	Feedback Voltage (V)	Switching Frequency	Package	Notes
MP1522	2.7 – 25	25	0.45	0.65	1.0	1.23	Variable	SOT23-5	UVLO, Variable Freq
MP1531	2.7 – 5.5	22	0.65	0.8	0.5	1.25	250kHz	QFN16	Triple Output for TFT (< 7" Size)
MP1543	1.8 – 6	6	1.5	0.35	0	1.2	500kHz	TSOT23-5	SYNC Boost
MP1541	2.5 – 6	22	1.9	0.7	0.1	1.25	1.3MHz	TSOT23-5	UVLO, Internal Comp
MP1542	2.5 – 22	22	2.6	0.7	0.1	1.25	0.7/1.3MHz	MSOP8	Selectable Frequency
MP1527	2.6 – 25	25	3.0	0.9	0.5	1.22	1.3MHz	QFN16 / TSSOP14	Timer-Latch Fault Detection
MP1530	2.7 – 5.5	22	3.6	1.3	0.5	1.25	1.4MHz	QFN16 / TSSOP16	Triple Output for TFT
MP1517	2.6 – 25	25	4.0	0.9	0.5	0.7	1.1MHz	QFN16	UVLO, External Comp

## WHITE LED DRIVERS

Part No.	Input Voltage (V)	Output Voltage Max (V)	LEDs per String	Number of Strings	Integrated Flash	Feedback Voltage (V)	Switching Frequency	Open LED Prot.	Package	Type	Notes
MP3011	2.5 – 5.5		1	2			1.3MHz	Y	QFN16 (3x3)	Charge Pump	3% LED Current Matching
MP1519L	2.5 – 5.5		1	3		N/A	1.3MHz	Y	QFN16 (3x3)	Charge Pump	High Efficiency
MP1519	2.5 – 5.5		1	4		N/A	1.3MHz	Y	QFN16 (3x3)	Charge Pump	High Efficiency
MP1529	2.7 - 5	25	3	3	Y		1.2MHz	Y	QFN16 (4x4)	Boost	Backlight + Flash
MP3204	2.5 – 6	21	5	1		0.104	1.3MHz	Y	TSOT23-6	Boost	UVLO, Low EMI, Thermal Shutdown
MP3205	2.5 – 6	21	5	1		0.104	1.3MHz	Y	TSOT23-5	Boost	UVLO, Low EMI, Thermal Shutdown
MP1521	2.7 – 25	25	5	3		0.4	Variable	Y	MSOP10 QFN16 (3x3)	Boost	UVLO, Thermal Shutdown
MP1518	2.5 – 6	25	6	1		0.104	1.3MHz	Y	TSOT23-6 QFN8 (2x2)	Boost	UVLO, Thermal Shutdown
MP1523	2.7 – 25	25	6	1		0.4	Variable	Y	SOT23-5	Boost	UVLO, Variable Freq Thermal Shutdown
MP1517	2.6 – 25	25	4	1		0.70	1.1MHz	Y	QFN16	Boost	UVLO, External Comp
MP1528	2.7 - 36		9	1		0.40	Variable	Y	QFN6 (3x3)	Boost	Brightness Control

**CLASS D AUDIO AMPLIFIERS**

Part No.	Input Voltage (V)	Output Power (W)	Efficiency (%)	THD+N (%)	PSRR (dB)	Standby Supply Current ( $\mu$ A)	Package	Type	Notes
MP7720	9.5 – 24	20	93	0.04 @ 1W	60	10	PDIP8 / SOIC8	Mono	Single-Ended
MP7722	9.5 – 24	2 x 20	93	0.06 @ 1W	60	2	TSSOP20E	Stereo	Single Ended
MP7731	9.5 – 18	30	90	0.10 @ 1W	60	10	TSSOP20E	Mono	Full Bridge
MP7782	9.5 – 24	50	90	0.06 @ 1W	60	2	TSSOP20E	Mono	Full Bridge
MP8040	7.5 – 25	70	85	0.02	N/A	2.5	SOIC8E	Mono	Integrated Half Bridge

**CCFL DRIVERS**

Part No.	# of Lamps	V <sub>IN</sub> Min (V)	V <sub>IN</sub> Max (V)	I <sub>OUT</sub> Tolerance	I <sub>SUPPLY</sub> (mA)	Package	Integrated Switches	Notes
MP1010B	1	6.0	23	2%	1.8	TSSOP20/E	Y	Resonant Freq
MP1026	1	4.5	14	3%	1.2	TSSOP20E	Y	Resonant Freq
MP1038	Up to 30	10.0	32	3%	2.0	SOIC28 TSSOP28	N	Fixed Freq

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