

EasyPower™ | AC/DC POWER CONVERSION

AC Buck

	Part Number	Power (W)	V _{IN} (Min) (V)	V _{IN} (Max) (V)	Control Method	R _{DS(ON)} (Ω)	Breakdown Volt. (V)	No-Load Power (mW)	Package	Notes
	MP100	Up to 0.5	85AC	305AC	Smart LDO	9.5	700	100	SOIC8E	Inductor-Less Regulator for Low-Power Applications. Not Recommended for New Design / Recommend MP100L
	MP100L	Up to 0.5	85AC	305AC	Smart LDO	9.5	700	100	SOIC8E	Inductor-Less Regulator for Low-Power Applications, up to 0.5W
	MP103	Up to 1	85AC	305AC	Smart LDO		700	100	SOIC8E	Inductor-Less Controller for Low-Power Applications, up to 1W
	MP153	Up to 6	20 (AC/DC)	265 (AC/DC)	Non-Isolated	15	500	150	TSOT23-5 SOIC8	Off-Line Regulator, up to 360mA Output Current
	MP156	Up to 3	20 (AC/DC)	265 (AC/DC)	Non-Isolated	20	500	30	TSOT23-5 SOIC8	Off-Line Regulator, up to 220mA Output Current
	MP157	Up to 6	20 (AC/DC)	265 (AC/DC)	Non-Isolated	10	500	100	TSOT23-5 SOIC8	Off-Line Regulator, up to 360mA Output Current
	MP158	Up to 2	20 (AC/DC)	265 (AC/DC)	Non-Isolated	20	500	100	TSOT23-5 SOIC8	Off-Line Regulator, up to 70mA Output Current
New	MP171	Up to 2	20 (AC/DC)	305 (AC/DC)	Non-Isolated	20	700	30	TSOT23-5 SOIC8	Off-Line Regulator, up to 60mA Output Current
New	MP172	Up to 3	20 (AC/DC)	305 (AC/DC)	Non-Isolated	16	700	30	TSOT23-5 SOIC8	Off-Line Regulator, up to 120mA Output Current
New	MP173	Up to 4	20 (AC/DC)	305 (AC/DC)	Non-Isolated	14	700	30	TSOT23-5 SOIC8	Off-Line Regulator, up to 280mA Output Current
New	MP174	Up to 5	20 (AC/DC)	305 (AC/DC)	Non-Isolated	13.5	700	30	TSOT23-5 SOIC8	Off-Line Regulator, up to 400mA Output Current

FLYBACK

Secondary-Side Regulation

	Part Number	Typ Max Power (W)	V _{IN} (Min) (V)	V _{IN} (Max) (V)	Type	FSW (Max) (kHz)	Control Method	Breakdown Volt. (V)	R _{DS(ON)} (Ω)	Package	Notes
	HFC0100	120	85AC	305AC	Controller		Quasi-Resonant	700		SOIC8	Quasi-Resonant
	HFC0300	120	85AC	305AC	Controller		Variable Freq	700		SOIC-7	Variable Off-Time
	HFC0310	120	85AC	305AC	Controller	600	Fixed Freq			SOIC8	Programmable Fixed-Frequency
	HFC0400	120	85AC	305AC	Controller	65	Fixed Freq	700		SOIC8-7A	Fixed-Frequency Flyback Controller Not Recommended for New Design / Recommend HFC0500
New	HFC0500	120	85AC	305AC	Controller	65	Fixed Freq	700		SOIC8-7A	HV Start-Up, X-Cap Discharge, Brown In/Out
New	HF900	8	85AC	440AC	Regulator	300	Peak Current	900	13	PDIP8-7EP SOIC14-11	Integrated 900V MOSFET
New	HF500-15	15	85AC	305AC	Regulator	65	Fixed Freq	700	4.5	SOIC8-7B	Integrated 700V MOSFET

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Primary-Side Regulation

	Part Number	Typ Max Power (W)	V _{IN} (Min) (V)	V _{IN} (Max) (V)	Type	Breakdown Volt. (V)	R _{DS(ON)} (Ω)	Package	Notes
	MP020-5	7	85AC	305AC	Regulator	700	10	SOIC8-7A	CV/CC Control, up to 7W
New	MP023		85AC	305AC	Controller	700		SOIC8-7A	CV/CC Control

LLC WITH 600V HALF-BRIDGE DRIVERS

	Part Number	R _{src} /R _{sink} (Ω)	Control Method	Topology	High-Voltage Start-Up	Package	Notes
	HR1000	4 / 2	Resonant	LLC	No	SOIC16	Controller, Variable Frequency, High-Power Applications. Not Recommended for New Design / Recommend HR1000A
	HR1000A	4 / 2	Resonant	LLC	No	SOIC16	Controller, Variable Frequency, High-Power Applications
New	HR1001B	4 / 2	Resonant	LLC	No	SOIC16	Controller, Variable Frequency, Noise-Proof Enhanced Version of HR100, Two Level OCP, 1st level Auto Restart, 2nd Level Latch
New	HR1001A	4 / 2	Resonant	LLC	No	SOIC16	Two Level OCP via Frequency Shift and Auto-Restart. Other features same as HR1001B.
New	HR1001L	4 / 2	Resonant	LLC	No	SOIC16	Two Level OCP via Frequency Shift and Latch. Other features same as HR1001B.

PFC + LLC COMBO CONTROLLER

	Part Number	V _{CC} (Max) (V)	LLC Control Method	PFC Control Method	Topology	High-Voltage Start-Up	Package	Notes
New	HR1200	30	Resonant	DCM/CC	PFC+LLC	Yes	TSSOP28 SOIC28	Digital PFC + Analog LLC, with Graphic User Interface

PFC

	Part Number	V _{IN} (Min) (V)	V _{IN} (Max) (V)	I _{GATE SRC} / I _{GATE SINK} (mA)	Control Method	Topology	High-Voltage Start-Up	Package	Notes
	MP44010	85AC	305AC	-350 / 600	Boundary Mode	Boost/ Buck-Boost	No	SOIC8 DIP8	Controller, Ultra-Low Start-Up Current (15μA)
	MP44011	85AC	305AC	-350 / 600	Boundary Mode	Boost/ Buck-Boost	No	SOIC8	Harmonic Injection Function (Reduced Capacitor Value and Inductor Size Compared with MP44010)
New	MP44014	85AC	305AC	-750 / 800	Boundary Mode	Boost/ Buck-Boost	No	SOIC8	Controller (BOM to BOM with L6562)
New	MP44014A	85AC	305AC	-750 / 800	Boundary Mode	Boost/ Buck-Boost	No	SOIC8	Controller (BOM to BOM with L6562A)

SYNCHRONOUS RECTIFIERS | AC/DC POWER CONVERSION**Flyback Technology (Fast Turn-Off, Intelligent)**

	Part Number	Type	VDD (Min) (V)	VDD (Max) (V)	FSW (Max) (kHz)	Drain Rating (V)	Operating Current (mA)	Regulation Voltage (mV)	RDS(ON) (mΩ)	Package	Notes
	MP6900	Controller	6	27	400	180	8	70	Ext. FET	QFN6 (3x3)	Works with both Standard and Logic Level FETS
	MP6902	Controller	6	27	400	180	8	70	Ext. FET	SOIC8	Light-Load Management, Not Recommended for New Design / Recommend MP6907
	MP6905	Controller	8	24	400	180	8	30	Ext. FET	SOIC8	Light-Load Management, Not Recommended for New Design / Recommend MP6906
New	MP6906	Controller	4.2	35	400	180	8	30	Ext. FET	SOIC8 TSOT23-6	VCC down to 4.5V, Light-Load Management, Turn-Off Blanking and SYNC Feature
New	MP6907	Controller	4.2	35	400	180	8	50	Ext. FET	SOIC8 TSOT23-6	VCC down to 4.5V, Light-Load Management, Turn-Off Blanking and SYNC Feature, Better Efficiency than MP6902
	MP6960	Regulator	8	24	400	180	8	70	Ext. FET	SOIC8	Integrated CC/CV Controller
	MP6910	Regulator	6	27	400	180	8		10	T0220-3	100V FET, VOUT up to 19V
	MP6920	Regulator	8	24	400	60	5		10	SOIC8E	Integrated FET, VOUT up to 12V

LLC Topology (Fast Turn-Off, Intelligent)

	Part Number	Type	FSW (Max) (kHz)	Drain Rating (V)	Operating Current (mA)	Regulation Voltage (mV)	IQ (mA)	Single/Dual	Package	Notes
	MP6903	Controller	300	180	8	70	0.25	Single	SOIC8E	High Noise Immunity, Light-Load Management
	MP6922	Controller	300	180	16	70	0.5	Dual	SOIC8E SOIC14	Vfwd 70mV for LLC, Shorten LL Mode Entry Ton Threshold, Disable Light-Load Entry when No Gate Pulse
	MP6922A	Controller	300	180	16	30	0.5	Dual	SOIC8E SOIC14	High Efficiency, Vfwd 30mV for LLC, Light-Load Management
New	MP6922L	Controller	300	180	16	70	0.6	Dual	SOIC8	Vfwd 70mV for LLC, Shorten LL Mode Entry Ton Threshold, Disable Light-Load Entry when No Gate Pulse
New	MP6923	Controller	300	180	16	15	0.6	Dual	SOIC14	High Efficiency, Vfwd 15mV for LLC