



M3TEK

A Passion for High Performance Power IC



Higher Performance Power Management IC design
High Efficiency, Low inductance, Stable Voltage,
Low Interference

- BUCK Converter
- PMUS
- Load Switch, Type-C port protector
- Linear Regulators
- Charger
- Boost Converter/Controller,
Buck Boost Controller,



Product Selection Guide

2024-2025

ABOUT US

Founded in 2010, M3 Technology Inc.(M3TEK) design, testing, production and marketing analog and mixed-signal integrated circuits. Our main focus is on high-end power management ICs, providing power management IC chips with high efficiency, Low inductance, stable voltage and low interference. Our core team is composed of elites from the United States, Taiwan and Greater China with world class expertise on power IC design, fabrication and packaging.

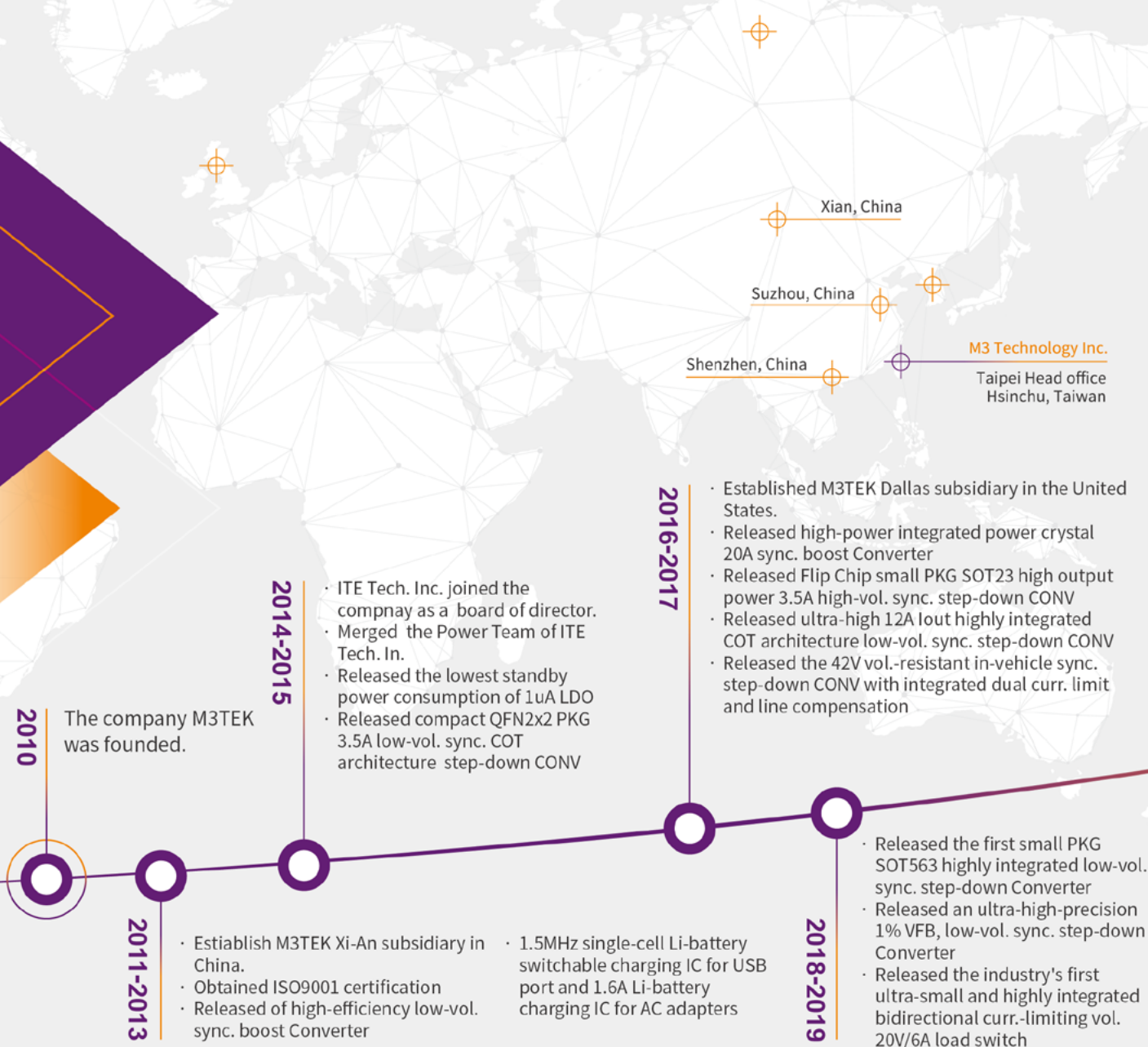
Power management ICs have been widely used in products such as computers, communication and consumer electronics. Emerging technological innovations such as Wi-Fi 8, 5G, cloud storage and USB Type-C will require higher power, higher performance and highly integrated power management ICs.

Our company is oriented to best serve our customers and establish long-term relationships with customers. We provide customized, highly integrated, high performance, high quality and highly competitive power management solutions to our customers with fast market feedback, and the advantageous environment of local production.

Vision

M3TEK the preferred supplier of power management solutions for customers by continuous efforts from the whole company.

MILESTONES



Missions

Customers' Experience Enhance

M3TEK's mission is to provide customers with innovative, reliable, efficient and high CP value products continuously in order to enhance customers trust and the competitiveness of their products.

R&D Investment Continuance

We consistently investing a lot of resources in R&D, and continue to challenge and research new technologies to develop products with higher performance.

New Product Development Acceleration

5G+WiFi 8 enables the telemedicine, distance teaching and telecommuting. Through the innovation of M3TEK products, we assist our customers to realize remote applications, reduce carbon emissions, and slow down global warming.

Being Ready All of Time

The industrial environment and the end consumer market are subject to external stimuli, and demand is changing rapidly. M3TEK develops products with high specifications, high reliability, and low power consumption to respond to changes in the industry.

2020-2021

- Released 28V high-vol. 4A small PKG OVP & OCP load switch IC, and low-vol. 4A small PKG DFN1.2x1.6 protection switch IC
- Released highly integrated Type-C OVP IC with integrated TVS protection components
- Released a highly integrated step-down-boost CONV and CONT, and low-vol. and high 6A Iout small PKG DFN2x3 sync. step-down CONV
- The company applied for a public offering and prepares for a listing plan.
- Announced supercapacitor power manager for use in backup power application
- Released sync. step-down IC with 24V high-vol. 2A/3A and supporting 100% high duty ratio
- Released 2-way 36V 3A sync. buck CONV, equipped with 4-way constant Iout limit
- Released sync. buck CONV with high vol. 24VIN/4A Iout small PKG SOT23_8L
- Released highly integrated curr. sync. buck CONV with high vol. 24VIN/5A Iout and equipped with external adjustable curr. limit
- Released high performance buck CONV with high-vol. 28VIN/ 6A Iout and 100% duty ratio for network communication & computing applications
- Released sync. low- vol. buck CONV with switching freq. of 1.2MHz and supporting 7A continuous Iout, integrated in small PKG QFN2x3
- Announced highly integrated high-vol. sync. boost CONV, supporting switching curr. reaching 18A, and integrated in small PKG QFN3x4

2024-2025

- MT8351 ultra-low Iq 350nA Product wins the Best Power Management Semiconductor Award winner in 2024 EE Awards
- Released buck CONV supporting 3A Iout and integrated in DFN1.5x1.0_5L small PKG.
- Released buck CONV supporting low-vol. and high-curr. 5A, integrated in QFN3x3_16L/high-curr. 6A, integrated in QFN3x3_12L.
- Announced highly integrated buck-boost CONV with 28V/6A, 500KHz & 200KHz, integrated in QFN5x5_28L.
- Announced synchronous buck CONV with low-vol., 6A/2.2MHz and fast dynamic response.
- Announced Curr regulating CONV supporting DDRII-IV with curr. of 3A
- Announced buck-boost CONV with wide range voltage of 28V/6A.
- Announced 21V high-vol., 6A OCP & OVP load switch with bidirectional current switch.
- Announced sync. buck CONV with low-vol., 1.2MHz 6A/10A Iout and fast dynamic response.
- Announced sync. buck CONV with 28V/8A and adjustable freq. of 200K~1.2MHz & 18V/8A/700KHz highly integrated in QFN3x3_16L

2022-2023

- Released a multi-LDO output integrated load switch miniaturized PMIC
- Released a high-vol. 28VIN , high 6A Iout sync. step-down 100% Duty step-down Converter
- Released an ultra-small package 1.6x1.2, high curr. 4A load switch protection IC
- Released a highly integrated sync. boost 20A Converter

- Announced Advanced process low-vol. high-freq. 2.5MHz switching step-down CONV
- Announced high-freq. switching step-down CONV integrated in DFN1.5x1.5 small PKG
- Announced high-precision charge and discharge with built-in balancing supercapacitor PWR management IC
- Announced 18V high-vol. 1.5MHz/2.5MHz high-freq. switching step-down CONV integrated in SOT563 small PKG
- Announced 28V high-vol., OCP & OVP, adjustable curr. limit load switch integrated in DFN2x2 PKG

- Announced wide range VIN, OVP & OCP, reverse voltage protection PWR transistor CONT load switch
- Announced supercapacitor PWR management IC that supports high-vol. single cell/double cell high-precision charging and discharging and built-in balancing
- Announced sync. step-down CONV with a high-vol. of 26V/5A, 200KHz/500KHz and an adjustable curr. limit
- Announced 18V high-vol., high-curr. load switch with an external reverse PWR transistor CONT
- Announced a single-input, dual-output, low-vol. 2A, high-freq. 2.5MHz, and small size step-down CONV

M3 TECHNOLOGY INC.

PRODUCT CATEGORY

- Boost DC-DC PWM Converter/Control
- Buck-Boost DC-DC PWM Converter/Control
- LV Buck (Step-Down) DC/DC Converter
- HV Buck (Step-Down) DC/DC Converter
- Current Limit Load Switch
- Type-C CC & SBU Protection IC

- Multi-Channel PMUs
- Super Capacitor Power Manager
- LDO Regulators
- DDR Termination
- Lithium Battery Charger
- Ideal Diode



A PASSION FOR
HIGH PERFORMANCE POWER IC

M3 TECHNOLOGY INC.

Boost (Step-Up) DC/DC Converter

 New product

Part No.	Input Voltage(V)	Switch Current(A)	Freq. (MHz)	Output Voltage(V)	Quiescent Current(uA)	Shutdown Current(uA)	Accuracy(%)	VFB(V)	Eff(%)	EN	Soft Start	OTP	Short Protection	Package(mm)	Notes
MT5075	0.9~5	0.35 0.45 0.8	0.8	Fixed 2.8/3.3/5	9	0.01	-	-	92	V	X	X	X	SOT23_5L	Low Input Voltage Step-up Converter with Low Quiescent Current
MT5070	0.9~5	0.45	0.8	Fixed 2.7/3.3/5 Vadj	12	0.01	±3	0.5	97	V	X	X	X	SOT23_6L	Low Input Voltage Step-up Converter with Low Quiescent Current
MT5080	2.7 ~ 6	1	1.5	Vadj ~50Vmax	160	1	±3	1.25	83	V	V	V	X	SOT23_5L DFN2x2_6L	Asynchronous Step-Up DC/DC Converter with 50V 1A Integrated Switch
MT5037	2.5 ~ 5.5	4	0.8	Fixed 5.15 Vadj	125	0.1	±2	0.5	95	V	V	V	V	DFN3x3_10L	High Current Sync-Boost Converter Light Load Pulse Skip Mode
MT5033	2.5 ~ 5.5	6	0.8	Fixed 5.15 Vadj	125	0.1	±2	0.5	95	V	V	V	V	SOP8_EP	High Current Sync-Boost Converter Light Load Pulse Skip Mode
MT5035	3 ~ 5.5	6.5	0.55	Fixed 5.15 Vadj	80	0.2	±3	0.5	95	V	V	V	V	SOP8_EP	High Current Sync-Boost Converter, Light Load Pulse Skip Mode, Thermal Fallback
MT5036	2.5 ~ 5.5	6.6	0.8	Fixed 5.15 Vadj	125	0.1	±2	0.5	95	V	V	V	V	QFN4x4_16L	High Current Sync-Boost Converter Light Load Pulse Skip Mode
MT5083	3~30	20	Adj 50K~1MHz	30V_Max Vadj	70	3.5	±1.5	1.203	95	V	V	V	X	QFN4x4_22L	High Current Sync-Boost Converter with Light Load PSM Mode
MT5087	2.7~18	20	Adj 50K~1MHz	18V_Max Vadj	70 140	5	±1.5	1.203	95	V	V	V	X	QFN4x4_20L	High Current Sync-Boost Converter with Light Load PSM Mode
MT5087A	2.7~18	20	Adj 50K~1MHz	18V_Max Vadj	70 140	5	±1.5	1.203	95	V	V	V	X	QFN4x4_20L	High Current Sync-Boost Converter Forced PWM
MT5088	2.7~30	20	Adj 50K~1MHz	30V_Max Vadj	70	5	±1.5	1.203	95	V	V	V	X	QFN4x4_20L	High Current Sync-Boost Converter with Light Load PSM Mode
MT5088A	2.7~30	20	Adj 50K~1MHz	30V_Max Vadj	70	5	±1.5	1.203	95	V	V	V	X	QFN4x4_20L	High Current Sync-Boost Converter Forced PWM

Boost (Step-Up) DC/DC PWM Control

Part No.	Input Voltage(V)	Freq.	MOSFET Type	Output Voltage(V)	Quiescent Current(uA)	Shutdown Current(uA)	Accuracy(%)	VFB(V)	Eff(%)	EN	Soft Start	OTP	Short Protection	Package(mm)	Notes
MT5086	2.7 ~ 30	Adj 50K~1MHz	Dual N	30V_Max	55	5	±1.5	1.203	95	V	V	V	V	QFN3x3_16L	2.7V to 30V Input 55µA Quiescent Current Synchronous Boost Controller

Buck-Boost (Step Down-Up) DC/DC PWM Control and Converter

Part No.	Input Voltage(V)	Output Voltage(V)	Freq. (kHz)	Accuracy(%)	VFB(V)	MOSFET Type	Quiescent Current(mA)	Shutdown Current(uA)	Eff(%)	EN	Soft Start	OTP	Short Protection	Package(mm)	Notes
 MT5615	2~5.5	2~5V	2000	±1	0.5	Integrated *4	0.045	0.5	94	V	V	V	V	TSOT23_8L DFN3x3_8L	5V 1A Synchronous COT. Buck-Boost Converter
MT5628	3.1~28	1V~28V	600	±1	1	External	1.2	1	97.5	V	V	V	V	QFN4x4_20L	28V Wide Voltage Range 4-Switch Buck-Boost Controller
MT5629	3.1~28	1V~28V	600	±1	1	Integrated 17mohm*4	1.2	1	97.5	V	V	V	V	QFN5x5_28L	28VIN up to 6A Synchronous 4-Switch Buck-Boost Converter
MT5639	3.1~28	1V~28V	200	±1	1	Integrated 17mohm*4	1.2	1	97.5	V	V	V	V	QFN5x5_28L	28VIN up to 6A Synchronous 4-Switch Buck-Boost Converter

LV Buck (Step-Down) DC/DC Converter

 New product

	Part No.	Input Voltage(V)	Output Current(A)	Freq. (MHz)	Quiescent Current(μA)	Accuracy (%)	VFB (V)	Max. Duty %	Soft Start	OTP	Short Protection	Discharge Resistor(Ω)	Package (mm)	Notes
	MT8351A (D)(Q)	2~5.5	1	1.5	0.35	±1	-	100	V	V	V	5	DFN2x2_6L	Synchronous Step-Down Converter, VSET pin
	MT8361D	2~5.5	1	1.5	0.35	±1	-	100	V	V	V	5	WCSP_6L	Synchronous Step-Down Converter, VSET pin
	MT8101	2.5~6	1	2.3	26	±2	-	100	V	V	V	15	DFN1.2x1.2_6L	Synchronous Step-Down Converter, Vout Fixed 0.9/1.1/1.2/1.3V
	MT8821N(A)	2.3~5.5	1	2.6	25	±0.5	0.6	100	V	V	V	1000	DFN1.0x1.5_6L	Synchronous COT Step-Down Converter, EN, Discharge
	MT3152N(A)	2.5~6	1.5	1.5	28	±1.5	0.6	100	V	V	V	50	SOT23_5L DFN2x2_6L	Sync. COT Buck Converter with Output Discharge (2A Peak)
	MT3161	2.5~6	1.5	2.5	15	±1.5	0.6	100	V	V	V	190	SOT563 QFN1.1x1.1_6L	Sync. COT Buck Converter with Light Load PSM (2A Peak)
	MT8161N(A)	2.7~6	1.5	2.5	25	±1.5	0.6	100	V	V	V	20	SOT563	Sync. COT Buck Converter with Light Load PSM (2A Peak)
	MT3132N(A)	2.5~6	1.5	2.5	28	±2	0.6	100	V	V	V	50	SOT23_5L DFN2x2_6L	Sync. COT Buck Converter with Output Discharge (2A Peak)
	MT8152N(A)	2.7~6	2	1.5	28	±1.5	0.6	100	V	V	V	20	SOT23_5L DFN2x2_6L	Sync. COT Buck Converter with PG, Output Discharge (3A Peak)
	MT8182A	2.7~5.5	2	1.5	500	±0.5	0.6	100	V	V	V	20	DFN1.5x1.5_6L	Fast PWM Synchronous Step-Down Converter (2.5A Peak)
	MT8183A	2.5~5.5	2	1.5	600	±0.5	0.6	100	V	V	V	20	DFN1.5x1.5_6L	Synchronous Step-Down DC/DC Converter (3A Peak)
	MT3122A	2.5~6	2	2.5	500	±1	0.6	100	V	V	V	1400	DFN1.5x1.5_6L	Sync. COT Buck Converter with PG, Output Discharge
	MT3112	2.5~6	2	2.5	15	±2	0.6	100	V	V	V	1500	SOT23_5L	Sync. COT Buck Converter with PG, Output Discharge for 1-Cell Li-Ion Application
	MT8102N(A)	2.7~6	2	2.5	28	±1.5	0.6	100	V	V	V	50	SOT23_5L SOT23_6L DFN2x2_6L	Sync. COT Buck Converter with PG, Output Discharge (3A Peak)
	MT8192N(A)	2.7~5.5	2	2.5	25	±0.5	0.6	100	V	V	V	20	DFN2x2_6L DFN1.5x1.5_6L	Fast PWM Synchronous Step-Down Converter
	MT3162	2.5~6	2	2.5	15	±1.5	0.6	100	V	V	V	150	SOT563	Sync. COT Buck Converter with Light Load PSM
	MT8162N(A)	2.7~6	2	2.5	25	±1.5	0.6	100	V	V	V	20	SOT563	Sync. COT Buck Converter with Light Load PSM (2.8A Peak)
	MT8172N	2.7~6	2	2.5	25	±1.5	0.6	100	V	V	V	20	SOT563	Sync. COT Buck Converter with Light Load PSM (2.8A Peak) With PG Function
	MT8103N(A)	2.5~5.5	3	1.25	18	±1	0.6	100	V	V	V	10	SOT563	Sync. COT Buck Converter with PG, Output Discharge (4A Peak)
	MT8163A	2.7~5.5	3	1.4	600	±0.5	0.6	100	V	V	V	20	DFN 1.5x1.5_6L	Synchronous Step-Down DC/DC Converter
	MT8173N(A)	2.5~5.5	3	1.5	18	±0.5	0.6	100	V	V	V	20	DFN1.5x1.0_5L	Synchronous Step-Down DC/DC Converter
	MT8373N(A)	2.5~5.5	3	1.5	18	±0.5	0.6	100	V	V	V	12	DFN2x2_8L	Synchronous Step-Down DC/DC Converter
	MT8133N	2.5~5.5	3	1.5	18	±2	0.6	100	V	V	V	50	DFN2x2_8L SOT23_5(6)L	Synchronous Step-Down DC/DC Converter
	MT8193N(A)	2.5~5.5	3	1.5	18	±2	0.6	100	V	V	V	20	SOT23_5(6)L DFN2x2_8L	Sync. COT Buck Converter with PG, Output Discharge
	MT8068N	2.5~5.5	3	1.5	18	±2	0.6	100	V	V	V	50	DFN3x3_10L	Synchronous Step-Down DC/DC Converter
	MT8168N(A)	2.5~5.5	3	1.5	18	±2	0.6	100	V	V	V	20	DFN3x3_10L	Synchronous Step-Down DC/DC Converter

LV Buck (Step-Down) DC/DC Converter

 New product

Part No.	Input Voltage(V)	Output Current(A)	Freq. (MHz)	Quiescent Current(μA)	Accuracy (%)	VFB (V)	Max. Duty %	Soft Start	OTP	Short Protection	Discharge Resistor(Ω)	Package (mm)	Notes
MT8593N(A)	2.5~5.5	3	2.5	18	±2	0.6	100	V	V	V	20	SOT23_5(6)L DFN2x2_8L	Sync. COT Buck Converter with PG, Output Discharge
MT8568N(A)	2.5~5.5	3	2.5	18	±2	0.6	100	V	V	V	20	DFN3x3_10L	Synchronous Step-Down DC/DC Converter
MT3124	2.5~6	3.5	1.2	15	±1.5	0.6	100	V	V	V	1000	QFN2x2_12L	Sync. COT Buck Converter with PG
MT8124N(A)	2.5~5.5	3.5	1.25	20	±0.5	0.6	100	V	V	V	20	QFN2x2_12L	Fast-PWM Synchronous Step-Down Converter
MT3153	2.5~6	3.5	1.5	15	±2	0.6	100	V	V	V	240	TSOT23_5L	Sync. COT Buck Converter with PG, Output Discharge
MT3194N	2.7~6	4	1.2	18	±1	0.6	100	V	V	V	65	QFN2x3_12L	Fast-PWM Synchronous Step-Down Converter
MT8194N	2.7~5.5	4	1.2	20	±1	0.6	100	V	V	V	20	QFN2x3_12L	Fast-PWM Synchronous Step-Down Converter
MT3123 MT3123A MT3123B	2.5~6	4	1.25	15	±1.5	0.6	100	V	V	V	1000 1000 260	QFN3x3_16L	Sync. COT Buck Converter with PG Sync. COT Buck Converter with PG, SS Sync. COT Buck Converter with PG, SS, Discharge
MT8123N	2.5~5.5	4	1.25	18	±1	0.6	100	V	V	V	20	QFN3x3_16L	Low Iq FAST-PWM Synchronous Step-Down Converter
MT3068	2.5~6	4	1.5	15	±2	0.6	100	V	V	V	240	DFN3x3_10L	Sync. COT Buck Converter with PG, Output Discharge
 MT8365N(A)	2.5~5.5	5	1.2	21	±1	0.4	100	V	V	V	X	SOT583_8L	Sync. COT Step-Down DC/DC Converter with PG,EN,
MT3126	2.5~6	5	1.2	15	±1	0.6	100	V	V	V	1000	QFN2x2_12L	Sync. COT Buck Converter with PG
MT8126	2.5~5.5	5	1.25	20	±0.5	0.6	100	V	V	V	20	QFN2x2_12L	Fast-PWM Synchronous Step-down Converter
MT8165A	2.7~5.5	5	1.35	500	±0.5	0.61	100	V	V	V	15	QFN3x4_14L	Fast-PWM Synchronous Step-Down Converter
MT3035	2.5~6	5	1.5	15	±2	0.6	100	V	V	V	240	DFN3x3_10L	Sync. COT Buck Converter with SS, PG
MT3185	2.7~6	5	2.5	17	±1.0	0.8	100	V	V	V	50	DFN2x2_7L	Fast PWM Synchronous Step-Down Converter with PG
MT3196N	2.7~6	6	1.2	18	±1	0.6	100	V	V	V	65	QFN2x3_12L	Fast-PWM Synchronous Step-Down Converter
MT8196N	2.7~5.5	6	1.2	20	±1	0.6	100	V	V	V	20	QFN2x3_12L	Fast-PWM Synchronous Step-Down Converter
MT3127N(A)	2.7~6	6A/10A	1.2	18	±1.0	0.61	100	V	V	V	X	QFN3x3_9L	Sync. FAST PWM Buck Converter with PFM Mode "A" with Force PWM mode
MT3128N	2.7~6	6A/8A	1.2	18	±1.0	0.61	100	V	V	V	X	QFN4x4_20L	Sync. FAST PWM Buck Converter with PFM Mode
MT3128A	2.7~6	6A/8A	1.2	500	±1.0	0.61	100	V	V	V	X	QFN4x4_20L	Sync. FAST Force PWM Buck Converter with Force PWM mode
MT8129A	2.7~5.5	6A/10A	1.2	500	±0.5	0.61	100	V	V	V	20	QFN3x4_14L	Fast-PWM Synchronous Step-Down Converter
MT8859A	2.7~5.5	6A	1.2	500	±0.5	0.5	100	V	V	V	20	QFN2x3_14L	Fast-PWM Synchronous Step-Down Converter
MT3125	2.5~6	6	1.25	15	±1	0.6	100	V	V	V	1000	QFN3x3_16L	Sync. COT Buck Converter with PG
MT8139A	2.7~5.5	6A/10A	2.2	500	±0.5	0.5	100	V	V	V	20	QFN3x4_14L	Fast-PWM Synchronous Step-Down Converter
MT8106A	2.7~5.5	6	2.2	500	±0.5	0.61	100	V	V	V	20	QFN3x4_14L	Fast-PWM Synchronous Step-Down Converter

LV Buck (Step-Down) DC/DC Converter module

 New product

Part No.	Input Voltage(V)		Output Current(A)		Freq. (MHz)	Quiescent Current (uA)	Accuracy (%)	VFB (V)	Max. Duty %	Eff. (%)	Output Voltage(V)	Soft Start	OTP / Short Protection	Package(mm)	Advantage
MTM002	2.5~6	1.5	1.5	15	15	±2	0.6	100	92	Vadj	V	V	LGA3x3_7L	Sync. Buck Converter Module without ext inductor and cap (2A peak)	
MTM003	2.5~6	1.5	2.5	15	15	±2	0.6	100	92	Vadj	V	V	LGA3x3_7L	Sync. Buck Converter Module without ext inductor and cap (2A peak)	
 MTM006N(A)	2.5~5.5	3	2.2	20	20	±1	0.6	100	96	Vadj	V	V	QFN2.5x3.5_18L	Sync. Buck Converter Module without ext inductor and cap	

HV Buck (Step-Down) DC/DC Converter

Part No.	Input Voltage (V)		Output Current(A)		Freq. (KHz)	Accuracy (%)	VFB (V)	Max. Duty %	Eff. (%)	Soft Start	OTP	Short Protection	Package(mm)	Notes
MT3570N(A)	4.7~18	2	500	500	500	±2.5	0.8	100	95	V	V	V	SOT23_6L	Sync. Buck Converter with Light Load PSM
MT3770N(A)	4.7~24	2	500	500	500	±2.5	0.8	100	95	V	V	V	SOT23_6L DFN2x2_6L	Sync. Buck Converter with Light Load PSM
MT3622	4.3~24	2	650	650	650	±2	0.765	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3682	4.3~24	2	650	650	650	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3562N(A)	4.5~18	2	720	720	720	±2	0.804	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3582N(A)	4.5~18	2	720	720	720	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3552N(A)	4.5~18	2	720	720	720	±2	0.804	100	93	V	V	V	SOT563	Fast-PWM Synchronous Step-Down Converter
 MT3702N(A)	4.7~24	2	1400	1400	1400	±1.35	0.598	100	92	V	V	V	SOT23_6L	Sync. Step-Down Converter with Light Load PSM
 MT8552N(A)	4.5~18	2	1500	1500	1500	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3592N(A)	4.5~18	2	1500	1500	1500	±2	0.804	100	94	V	V	V	SOT563	Fast-PWM Synchronous Step-Down Converter
MT3510	4.7~18	2.5	500	500	500	±2.5	0.6	100	95	V	V	V	SOT23_6L	Sync. Buck Converter with Light Load PSM
 MT3703N(A)	4.7~24	2.5	1400	1400	1400	±1.35	0.598	100	92	V	V	V	SOT23_6L	Sync. Step-Down Converter with Light Load PSM
MT8553N(A)	4.5~18	2.5	1500	1500	1500	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3571	4.7~18	3	500	500	500	±2.5	0.8	100	95	V	V	V	SOT23_6L	Sync. Buck Converter with Light Load PSM
MT3713	4.7~24	3	500	500	500	±2	0.6	100	95	V	V	V	SOT23_6L	Sync. Buck Converter with Light Load PSM
MT3771N(A)	4.7~24	3	500	500	500	±2.5	0.8	100	95	V	V	V	SOT23_6L	Sync. Buck Converter with Light Load PSM
MT3623	4.3~24	3	650	650	650	±2	0.765	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3683	4.3~24	3	650	650	650	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
 MT8683N(A)	4~24	3	700	700	700	±1.35	0.6	100	92	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter

HV Buck (Step-Down) DC/DC Converter

 New product

Part No.	Input Voltage (V)	Output Current(A)	Freq. (KHz)	Accuracy (%)	VFB (V)	Max. Duty %	Eff. (%)	Soft Start	OTP	Short Protection	Package(mm)	Notes
MT3553N(A)	4.5~18	3	720	±2	0.804	100	93	V	V	V	SOT563	Fast-PWM Synchronous Step-Down Converter
MT3563N(A)	4.5~18	3	720	±2	0.804	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3583N(A)	4.5~18	3	720	±2	0.6	100	93	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
 MT8693N(A)	4~24	3	1400	±1.35	0.6	100	92	V	V	V	SOT23_6L	Fast-PWM Synchronous Step-Down Converter
MT3515N(A) (U)	4.5~24	3	1400	±1.5	0.8	100	93	V	V	V	TSOT23_8L DFN3x3_10L	Fast-PWM Synchronous Step-Down Converter
MT3593N(A)	4.5~18	3	1500	±2	0.804	100	94	V	V	V	SOT563	Fast-PWM Synchronous Step-Down Converter
MT3513	4.5~18	3.5	500	±2	0.6	90	95	V	V	V	TSOT23_6L	Sync. Buck Converter with Light Load PSM
MT3513A	4.5~18	3.5	500	±2	0.6	90	95	V	V	V	TSOT23_6L	Sync. Buck Converter Forced PWM Mode
MT3503	4.5~18	3.5	1000	±2	0.6	85	95	V	V	V	TSOT23_6L	Sync. Buck Converter with Light Load PSM
MT3503A	4.5~18	3.5	1000	±2	0.6	85	95	V	V	V	TSOT23_6L	Sync. Buck Converter Forced PWM Mode
MT3505	4.5~24	4	500	±1.5	0.6	100	95	V	V	V	TSOT23_8L	Fast-PWM Synchronous Step-Down Converter, Iout 5A Peak
MT3935N(A)	4.3~26	4	500	±2	0.8	100	95	V	V	V	SOP8_EP DFN4x3_14L	Fast-PWM Synchronous Step-Down Converter- COT UA mode, "A" with COT FPWM mode
MT3905N(U) (A)(H)	4~30	4	500	±2	0.8	100	95	V	V	V	SOP8_EP DFN4x3_14L	Fast-PWM sync BUCK converter, Iout 5A Peak "U" with ultra sonic mode, "A" with Forced PWM mode "H" with ultra sonic mode + Vo short Hiccup mode
MT3901N(X) (U)	4~36	5	180	±2	0.8	100	98	V	V	V	SOP8_EP	Sync. Buck Converter with Dual-Channel Current limit "N" With CC foldback, "X" Without CC foldback, "U" With CC foldback + Ultra-sonic mode at light load
MT3991N(U)	4~36	5	180	±2	0.8	100	98	V	V	V	SOP8_EP	Synchronous Step-down Converter with Programmable Current Limit
MT3931U	4.3~26	5	200	±2	0.8	100	97	V	V	V	SOP8_EP	Fast-PWM Synchronous Step-Down Converter- COT UA mode
MT3931A	4.3~26	5	200	±2	0.8	100	97	V	V	V	SOP8_EP	Fast-PWM Synchronous Step-Down Converter- COT FPWM mode
MT3906	4.2~28	6	560	±1	0.6	100	95	V	V	V	QFN3x3_16L	Fast-PWM Synchronous Step-Down Converter
MT3916	4.2~28	6	560	±1	0.6	100	95	V	V	V	QFN3x3_16L	Fast-PWM Synchronous Step-Down Converter for Fast Transient Response
 MT3526M	4~33	6	Program. 100~1000	±1	I2C	100	98	V	V	V	QFN3X3_18L	Synchronous Buck Converter with I2C Interface
MT3886MFFR	4.5~33	6	700	±1	0.604	100	94	V	V	V	QFN2X3_12L	Fast-PWM Synchronous Step-Down Converter
 MT3956N(A) (U)	3~18	6	1500	±1	0.6	100	94	V	V	V	QFN3x3_16L	Fast-PWM Synchronous Step-Down Converter
 MT3968N(A) (U)	3~18	8	700	±1	0.6	100	94	V	V	V	QFN3x3_16L	Fast-PWM Synchronous Step-Down Converter
MT3998MQDR MT3998MFAR	3~28	8	Adj. 200~1200	±1	0.6	100	95	V	V	V	QFN4x4_20L QFN3x3_16L	Fast-PWM Synchronous Step-Down Converter for Fast Transient Response

Current Limit Switch

N New product

Part No.	Input Voltage (V)		Max. Rating(V)	Output Current(A)	Switch Rds_on (mΩ)	I _{LMIT}	Fault	OVP Clamping(V)	SS	Short Circuit Protection	OTP	Package(mm)	Notes
MT7255	2.7~6	30	3	50	V	X	V	V	V	V	V	SOT23_3L DFN2x2_8L	Over-Voltage and Over-Current Protection IC, Output Discharge
MT7692	1.8~5.5	6.5	4	26 48	V	X	V	V	V	V	V	DFN1.2x1.6_4L SOT23_5L	Low Ron Power Distribution load switch, Output Discharge
MT7693	1.8~5.5	6.5	4	26 48	V	X	V	V	V	V	V	DFN1.2x1.6_4L SOT23_5L	Low Ron Power Distribution load switch (Reverse Blocking Function allows VOUT be higher than VIN in shutdown)
N MT7696	2.7~5.5	18	5	30	V	V	V	V	V	V	V	QFN2x2_9L	Programmable High Current Protection Switch with Reverse Blocking Programmable Soft-Start Time
MT7256	2.7V~6	30	5	50	V	X	V	V	V	V	V	DFN2x2_8L	Over-Voltage and Over-Current Protection IC, Output Discharging
MT7201(A)	2.7~18	20	5	25	V	X	V	V	V	V	V	DFN3x3_10L	Programmable Current Limit Load Switch with Clamping Output Voltage, Output Discharge
MT7203	4.5~18	20	5	25	V	X	V	V	V	V	V	DFN3x3_10L	Load Switch with Over-voltage Protection and Blocking FET Control, Clamping Output Voltage, Output Discharging
MT7281	3~24	28	5	35	V	V	V	V	V	V	V	QFN4x4_20L	Unidirectional 5A Load Switch with True Reverse Blocking and Fast Role Swap
MT7282	3~24	28	5	35	V	V	V	V	V	V	V	QFN4x4_20L	28V Bidirectional 5A Load Switch
N MT7956	4.5~36	45	5	32 55 400	V	X	V	V	V	V	V	QFN5x5_40L	2 to 1 Power MUX and Overvoltage protection for USB PD Application
MT7262	3~21	30	6	X	V	V	V	V	V	V	V	DFN2x2_8L	21V Bidirectional 6A Load Switch

Current Limit Switch With IEC/UL Safety approvals (IEC/UL 62368-1)

Part No.	Input Voltage (V)		Max. Rating(V)	Output Current(A)	Switch Rds_on (mΩ)	I _{LMIT}	Fault	OVP Clamping(V)	SS	Short Circuit Protection	OTP	Package(mm)	Notes
N MT7932	3.3~33	36	5	25	V	V	V	V	V	V	V	QFN3x3_16L	Load Switch with I2C Interface and Programmable Over-current Over-voltage protection for USB PD Application
MT7231	3~24	28	6	24	V	V	V	V	V	V	V	QFN2.5x3.2_16L	28V Unidirectional 6A Load Switch with True Reverse Blocking and Fast Role Swap
MT7232	3~24	28	6	24	V	V	V	V	V	V	V	QFN2.5x3.2_16L	28V Bidirectional 6A Load Switch

Current Limit Switch With IEC/UL Safety approvals (IEC/UL 2367)

Part No.	Input Voltage (V)		Max. Rating(V)	Output Current(A)	Switch Rds_on (mΩ)	I _{LMIT}	Fault	OVP Clamping(V)	SS	Short Circuit Protection	OTP	Package(mm)	Notes
N MT7633	2.7~5.5	6.5	3.5	40	V	V	V	V	V	V	V	TSOT23_6L	Load Switch with 28V Output Reverse Block & Adjustable Current limit, Fast Role Swap

Type-C CC and SBU pin ESD & High Voltage Short Protection Function

 New product

Part No.	Input Voltage (V)	Max. (V)	OVP Clamping (V) down resistors for handling dead battery condition	CC1/CC2 pull	OPT	Package(mm)	Notes
MT7538	0~24	28	V	V	V	QFN3x3_16L	Type-C CC and SBU pin Over-Voltage and IEC ESD Protection Switch
MT7530 MT7531	0~24	28	V	V X	V	QFN3x3_20L	Type-C CC and SBU pin Over-Voltage and IEC ESD Protection Switch

Multi Channel Power Management IC

Part No.	Input Voltage(V)	Freq. (MHz)	Output Current(A)	Quiescent Current(μA)	Output Voltage(V)	Accuracy(%)	VFB(V)	Eff. (%)	Max.Duty(%)	Soft Start	OTP/Short protection	Package(mm)	Notes
MT8293	2.5~5.5	1.25	3 x 2CH	500	Vadj	±0.5	0.6	93	100	V	V	DFN4x3_14L	Dual Sync COT Buck Converter with Light Load FPWM
MT3222	2.5~6	1.5	2.5 x 2CH	38	Vadj	±1.5	0.6	95	100	V	V	TSOT23_8L	Dual Sync COT Buck Converter with Light Load PSM
MT3223	2.5~6	1.5	3 x 2CH	38	Vadj	±1.5	0.6	95	100	V	V	DFN3x3_10L	Dual Sync COT Buck Converter with Light Load PSM
 MT3253N(A)	2.5~6	2.5	2.5 x 2CH	38	Vadj	±1.5	0.6	93	100	V	V	TSOT23_8L DFN2.5x1.5_8L	Dual Sync COT Buck Converter with Light Load PSM
MT3263	2.5~6	2.5	2.5 x 2CH	38	Vadj	±1.5	0.6	93	100	V	V	DFN2.5x1.5_8L	Dual Sync COT Buck Converter with Light Load PSM With Deep Sleep Function
 MT8272	4.5~18	1.5	2.5 x 2CH	250	Vadj	±2	0.6	94	100	V	V	DFN3x3_10L	Dual Fast-PWM Synchronous Step-Down Converter with Light Load PFM With Deep Sleep Function
 MT8252	4.5~18	0.72	3 x 2CH	250	Vadj	±2	0.6	96	100	V	V	DFN3x3_10L	Dual Fast-PWM Synchronous Step-Down Converter with Light Load PFM With Deep Sleep Function
MT3902U	4~36	0.18	4/CH	100	Vadj	±2	0.8	98	100	V	V	QFN5x5_20L	Dual Buck Converter with Quad-Channel Current limit With CC foldback + Ultra-sonic mode at light load
MT3902X	4~36	0.18	4/CH	100	Vadj	±2	0.8	98	100	V	V	QFN5x5_20L	Dual Buck Converter with Quad-Channel Current limit Without CC foldback + Ultra-sonic mode at light load

Super Capacitor Power Manager for Backup Power Applications

Part No.	Input Voltage(V)	Max.Rating(V)	Output Current(A)	Cap No.	INPUT OVP(V)	Soft Start	OTP/OVP/ Short Protection	Package(mm)	Notes
MT2600	2.5~5.5	12	2	2	6	V	V	DFN3x3_10L	Super Capacitor Power Manager for Backup Power Applications
MT2601N	2.5~5.5	18	2	2	6	V	V	DFN3x3_10L	Super Capacitor Power Manager for Backup Power Applications
MT2601B	2.5~5.5	18	2	2	6	V	V	DFN3x3_10L	Super Capacitor Power Manager for Backup Power Applications (w/o Automatic Cell Balancing)
 MT2603	2.5~5.5	18	4	2	6	V	V	DFN3x3_12L	Super Capacitor Power Manager for Backup Power Applications

Specific LDO

 New product

Part No.	Input Voltage (V)	Output Current(A)	Quiescent Current(μA)	Accuracy (%)	VFB (V)	Output Voltage(V)	Dropout Voltage(mV)	OTP	Short Protection	PSRR(dB)	Package(mm)	Notes
MT7110	2.5 ~ 5.5	250	1	±2	-	Fixed 1.2V, 1.65V, 1.8V, 2.5V and 3.3V	150@100mA 250@200mA	V	V	80/10Hz 68/100Hz	SOT23_5L	250mA Low Iq 1uA LDO
MT7107	2.5 ~ 5.5	250	12	±2	-	Fixed 0.9V, 1.05V, 1.1V, 1.2V, 1.5V, 1.8V, 2.5V, 2.8V, 3V, 3.3V	60@100mA 120@200mA	V	V	80/100Hz 50/100KHz	SOT23_5L DFN1x1_4L	250mA high PSRR Low Dropout Voltage Regulator
MT7113	1~5.5	3000	140	±1.5	0.8	Vadj	150@2A 250@3A	V	V	80/1KHz	SOP8_EP DFN3x3_10L	3A Ultra Low Dropout voltage Regulator

DDR termination

Part No.	Input Voltage (V)	LDOIN Ranger(V)	VO Ranger(V)	Output Current (Source/Sink Current from OUT)(A)	VO Tracks 1/2 of VDDQSEN Accuracy	High-Z Stage	Soft-stop Stage	Buffered Reference (REFOUT)	Cout (min)	VOSEN	UVLO	Soft Start	OTP/OVP	Package(mm)	Notes
MT7217	3.3 5	0.4~3.5	0.5~0.9	2	±1%	S3	S4/S5	+/-10mA	10uF	V	V	V	V	DFN2x2_10L	Meets DDR DDR2 JEDEC Specifications; Support DDR3 and Low Power DDR3/DDR4 VTT BusTermination
 MT7216	3.3	1.1~3.5	0.6~1.25	3	±1%	S3		+/-10mA	10uF	V	V	V	V	DFN3x3_10L	Meets DDR DDR2 JEDEC Specifications; Support DDR3 and Low Power DDR3/DDR4 VTT BusTermination

Lithium Ion Battery Charger

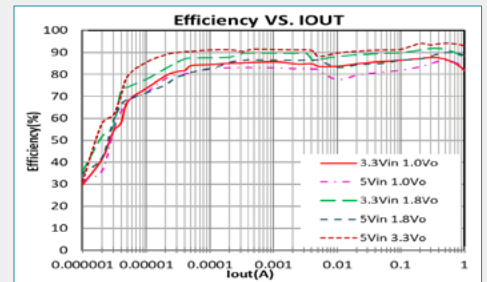
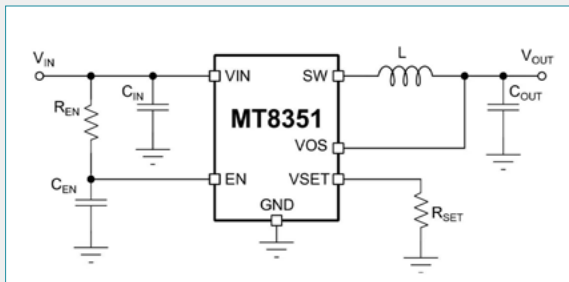
Part No.	Input Voltage (V)	Max. Rating(V)	Output Current(A)	Accuracy(%)	Recharge	Mode	Cell No.	Timer	INPUT OVP(V)	Soft Start	OTP/OVP Short Protection	Package(mm)	Notes
MT2575	4.5~6.5	20	1.5	±1	V	Linear	1	Adj	6.6	V	V	QFN3x3_16L	1 Cell Linear Charger Auto Input Current Limit Foldback for USB Port and Adapter Integrated Dynamic Power Path Management
MT2580	4.5~6.5	20	1.6	±1	V	Linear	1		6.6	V	V	SOP8_EP	1 Cell Linear Charger Auto Input Current Limit Foldback for USB Port and Adapter
MT2000	4.5 ~ 15	20	3	±1	V	PWM 1.5MHz	1	7hr	6.6 16.5	V	V	QFN4x4_20L	1 Cell Sync. Switching Charger with Power Path Control Dynamic Power Management
MT2001	4.5 ~ 15	20	3	±1	V	PWM 1.5MHz	1	7hr	6.6 16.5	V	V	QFN4x4_20L	1 Cell Sync. Switching Charger
MT2011	4.5 ~ 6.5	20	2	±1	V	PWM 1.5MHz	1		6.7/14	V	V	SOP8_EP	1 Cell Sync. Switching Charger Built In Reverse Current Blocking Diode
MT9528	4~6	18	ICHG=2A Iout=3A	±0.75	V	PMW 500KHz	2	8hr	V	V	V	QFN4x4_20L	500KHz Boost Charger for 2-Cell (2A) Li-Ion Battery with Reverse Buck Converter

Ideal Diode

Part No.	Input Voltage (V)	Max. Rating(V)	Output Current(A)	Fast Turn-off Limits Reverse Current	OPT	Package(mm)	Notes
MT7235	2.7~24	28	5	V	V	DFN2x3_8L	Very Low Forward Voltage Diode, Surge up to 28V

MT8351(wins 2024 EE Awards) /MT8361

5V Input 1A 1.5MHz 350nA I_Q Synchronous Step-Down Converter

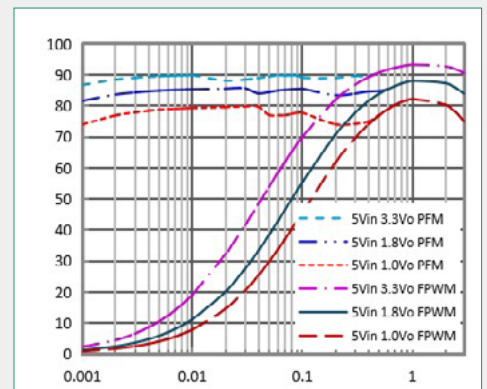
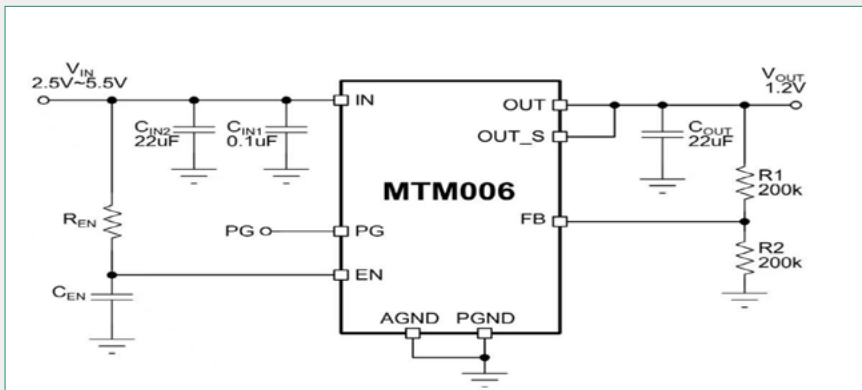


APPLICATIONS

- Wearable Electronics
- Headsets, Headphones, and Earbuds
- Medical Sensor Patches
- Smart Phone and Tablets
- Solid-State and Hard Disk Drivers
- DC/DC Micro Modules

MTM006

5.5V 3A 2.2MHz Ultra-Small and Ultra-Low Noise Power Module



APPLICATIONS

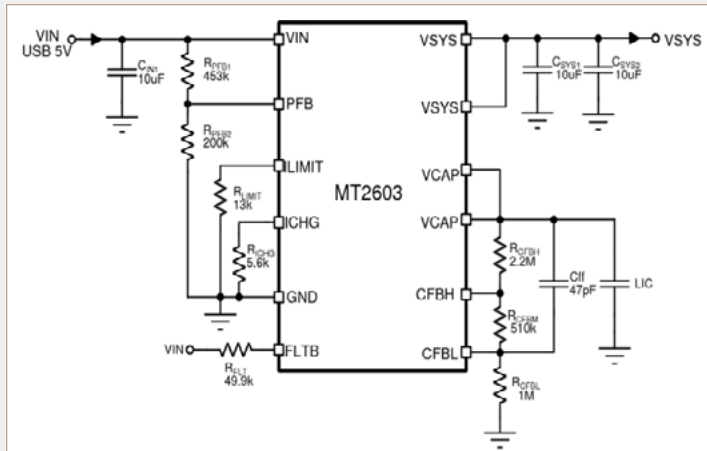
- Solid-State and Hard Disk Drives
- Portable / Handheld Devices
- Set-top Boxes.
- DC/DC Micro Modules

FEATURES	MT8351	MT8361	MTM006
350nA Operating Quiescent Current	V	V	20uA
Input Range from 2.0V to 5.5V	V	V	2.5V to 5.5V
18 Selectable Output Voltage from 0.4V to 3.6V through VSET pin	V	V	Output Voltage as low as 0.6V
Built-in Power Switches	215mΩ/105mΩ	145mΩ/70mΩ	25mΩ/16mΩ
Internal Soft-Start	V	V	V
Cycle-by-cycle Current Limit Protection	V	V	V
Input Under/Over Voltage Lockout	V	V	V
Output Discharging Function in Shutdown	V	V	V
Hiccup Mode for Short Circuit and Over-Load Protection	V	V	V
Thermal Shutdown Protection	V	V	V
Available in package.	DFN 2x2_6L	WCSP_6B	QFN 2.5x3.5_18L
Pb-Free RoHS Compliant	V	V	V

New Generation Super Capacitor

MT2603

Super Capacitor Power Manager for Backup Power Applications



FEATURES

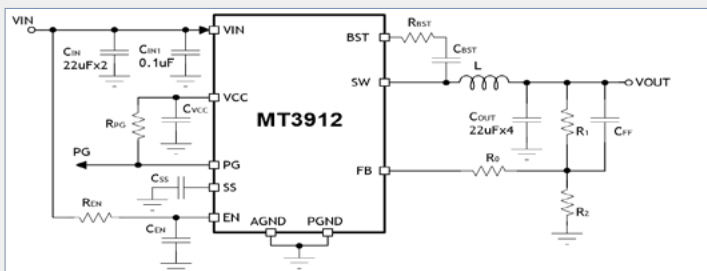
Input Range from 2.5V to 5.5V
18V input rating with OVP
Charge Current 750mA
Programmable 1.1V to 3.8V Cap Voltage Range
Programmable Super Cap Charge Current
Programmable Input Over Current Protection
Programmable Voltage and Current Thresholds
Automatic Main/Backup Switchover
Up to 4A Discharge Current
2.5μA Quiescent Current
DFN3x3_12L

APPLICATIONS

- Handheld Industrial Equipment
- Portable Computers
- Portable Devices with a Removable Battery

MT3912

18V 12A 1.5MHz Fast-PWM Synchronous Step-Down Converter



FEATURES

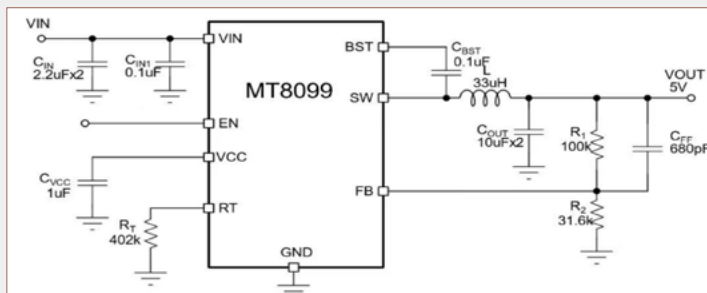
Wide Input Range from 3V to 18V
Fast-PWM COT control with superior transient performance
Integrate 13mΩ/5.5mΩ HS/LS Power Switches
Accurate 1.26V EN threshold with 260mV Hysteresis
200μA Low Quiescent Current for UA mode
150μA Low Quiescent Current for PFM mode
Internal fixed or External programmable Soft-start Time
Hiccup Mode Short Circuit Protection
Over-Temperature Protection
QFN3x3_16L

APPLICATIONS

- USB Type-C/PD Docking Station
- Networking Systems
- Laptop Computer
- Distributed Power Systems
- Flat Panel Television and Monitors

MT8099

100V Input 1A synchronous step-down converter



FEATURES

Wide Input Range from 4.5V to 100V
Ultra-low quiescent current <40uA
Adjustable switching frequency from 100kHz to 1200kHz
Internal Soft — Start and loop compensation with pre-biased output capability
High efficiency PFM control
Programmable Cycle-by-Cycle current limiting protection and Short Circuit Protection
Accurate EN pin threshold voltage for programmable input UVLO protection
Over-Temperature Protection
SOIC8EP

APPLICATIONS

- 48V Non — Isolated DC — DC Converter
- Automotive applications
- E-bike applications
- USB Type-C Power Delivery
- Industrial DC-DC
- General purpose

33V 6A Synchronous Buck Converter with I²C Interface



Wide Input Range: 4V to 33V

Wide Output Range: 3V to 21V

Support USB PD3.0/QC4.0 with PPS in 10mV steps

Programmable output constant-current regulation

Programmable output constant-current regulation 100K, 200K, 400K, 700KHz, and 1MHz

Programmable output slew rate, cable compensation

Quiescent Current 1035uA

OFN3mmX3mm 18L



- USB Type C docking station
- USB Type C monitor
- Power Banks
- Tablet Computer Accessories

32V 5A Load Switch with I²C Interface and Programmable Over-current Over-voltage protection for USB PD Application(IEC/UL 62368-1)



Input Voltage Range: 3.3V to 32V

Integrate a 25mΩ Ultra Low Rdson Protection Switch

I2C Interface

- Programmable Soft-Start Time
- Programmable Input Over-voltage Threshold
- Programmable current limit
- Programmable power direction
- Programmable ideal diode function

Protection:

- OCP/OVP/UVF
- Thermal Warning indicator
- Thermal Shutdown Protection and Auto Recovery

Bi-direction Control with reverse blocking function

Fast Role Swap

Enable Interface Pin

Port Discharge Interface Pin

Fault Indicator

Compact Package QFN 3x3_16L

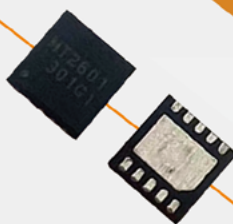
APPLICATIONS

- USB-C/ PD HUB
- Desktop PC
- Laptop PC
- Smart Phone

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Selection Guide

