



# Selection Guide

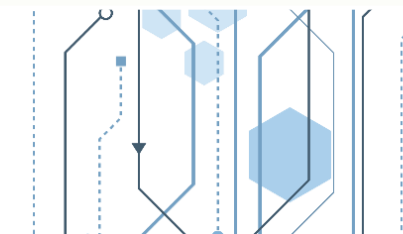
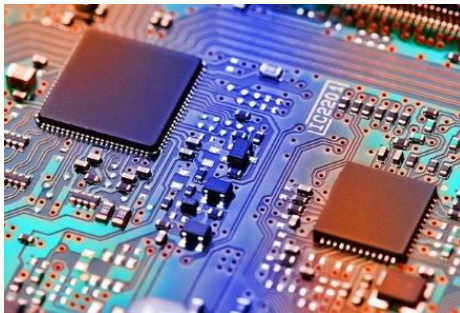
DC/DC

AC/DC

PMIC

Battery

Module



Lighting

Backlighting

MCU

ESD

Sensor

Motor

PLD

Audio

Gauge

SAR

**Q2 2024**



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The main products include: DC/DC, AC/DC, PMIC, LED lighting, BMS, light sensor, motor driver, audio power amplifier, power module, protection switch, Energy measurement, metering and signal chains solutions.

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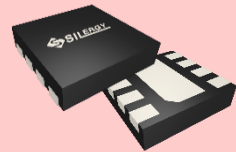
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**DC/DC**

Single Output Step Down (Buck) Converter  $V_{IN}$  Max < 7V

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{sw}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET (Ron H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY20208ADFC	2.5	5.5	0.45	/	0.6	$\pm 2\%$	400/200	1.5	DFN2x2-8	Power Good Indicator, Ultra Low Quiescent Current
SY20011DFC	2.2	5.5	0.5	1	1.2	$\pm 1.5\%$	280/120	0.4	DFN2x2-8	Power Good Indicator, Output Auto Discharge
SY20213BDTC	1.85	5.5	0.6	3	0.4	$\pm 2\%$	350/250	40	DFN1.45x1-6	
SY20018IAAC	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	260/170	50	SOT23-5	Output Auto Discharge
SY20018A1AAC	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	260/160	50	SOT23-5	
SY20108AAC	2.5	5.5	1	3	0.6	$\pm 2\%$	270/160	40	SOT23-5	
SY20097AAC	2.5	6.5	1	1.5	0.6	$\pm 2\%$	260/170	40	SOT23-5	
SY20019ARC	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	170/100	55	SOT563	Power Good Indicator, Hic-cup SCP, Auto Discharge
SY20019EARC	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	170/100	/	SOT563	Power Good Indicator, FCCM, Hic-cup SCP, Auto Discharge
SY20061IDEC	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	220/130	50	DFN2x2-6	Auto Discharge
SY20111DQC	2.5	5.5	1	2.5	0.6	$\pm 2\%$	230/150	40	DFN1.5x1.5-6	Output Auto Discharge
SY20109BDFC	2.4	6	1	1	1.2	$\pm 1.5\%$	300/130	400nA@STB=0 15 $\mu$ A@STB=1	DFN2x2-8	Power Good Indicator, ultra low $I_Q$ , Hic-cup SCP, Auto Discharge
SY20121ARC	2.6	5.5	1.5	2		$\pm 1\%$	180/100	55	SOT563	Output Auto Discharge
SY20123QWC	2.6	5.5	1.5	2	0.6	$\pm 1\%$	180/100	55	QFN1.5x1.5-7	Power Good Indicator, Auto Discharge
SY20149A1AAC	2.7	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	50	SOT23-5	Output Auto Discharge
SY20149IAAC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	50	SOT23-5	Latch-off Protection
SY20149E1AAC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	/	SOT23-5	Hic-cup SCP, Auto Discharge
SY20122A1ABC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	50	SOT23-6	Power Good Indicator, Hic-cup Protection
SY20122IABC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	50	SOT23-6	Power Good Indicator, Latch-off Protection
SY20122E1ABC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	/	SOT23-6	Power Good Indicator, Hic-cup SCP, Output Auto Discharge
SY20162IABC	2.7	5.5	2	1.5	0.6	$\pm 1.5\%$	130/85	50	SOT23-6	Power Good Indicator
SY20114ARC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	125/75	55	SOT563	Power Good Indicator, Hic-cup SCP, Auto-discharge
SY20114EARC	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$	125/75	/	SOT563	Power Good Indicator, Hic-cup SCP, Forced PWM, Auto Discharge
SY20012ART	2.5	5.5	2	1.5	0.6	$\pm 1.5\%$ (-40~125 $^{\circ}$ C)	45/35	21	SOT563	PFM Mode for Light Load Efficiency, Auto Discharge, ultra low $I_Q$
SY20013ART	2.5	5.5	3	1.5	0.6	$\pm 1.5\%$ (-40~125 $^{\circ}$ C)	45/35	21	SOT563	PFM Mode for Light Load Efficiency, Auto Discharge, ultra low $I_Q$

Single Output Step Down (Buck) Converter  $V_{IN}$  Max < 7V

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY20107ABC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	55	SOT23-6	Power Good Indicator, Latch off Protection, Auto Discharge
SY20107AABC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	55	SOT23-6	Power Good Indicator, Hic-cup SCP, Auto Discharge
SY20107EABC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	/	SOT23-6	Power Good Indicator, Hic-cup SCP, Forced PWM, Auto Discharge
SY20117DFC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	55	DFN2 $\times$ 2-8	Power Good Indicator, Latch off Protection, Auto Discharge
SY20117ADFC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	55	DFN2 $\times$ 2-8	Power Good Indicator, Hic-cup SCP, Auto Discharge
SY20117EDFC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	/	DFN2 $\times$ 2-8	Power Good Indicator, Hic-cup SCP, Forced PWM, Auto Discharge
SY20113CDFC	2.7	5.5	3	3	0.6	$\pm 2\%$	100/80	55	DFN2 $\times$ 2-8	Power Good Indicator
SY20112ARC	2.5	5.5	3	1.2	0.6	$\pm 1.5\%$	100/60	50	SOT563	Power Good Indicator, Output Auto Discharge
SY20112LARC	2.5	5.5	3	1.2	0.6	$\pm 1.5\%$	100/60	50	SOT563	Power Good Indicator, Latch-off Protection, Output Auto Discharge
SY20112EARC	2.5	5.5	3	1.2	0.6	$\pm 1.5\%$	100/60	/	SOT563	Power Good Indicator, Hic-cup SCP, Forced PWM, Output Auto Discharge
SY20115DBC	2.5	5.5	3	1	0.6	$\pm 1.5\%$	85/60	55	DFN3 $\times$ 3-10	Power Good Indicator, Latch off Protection, Auto Discharge
SY20124QWC	2.7	5.5	3	1.5	0.6	$\pm 1\%$	85/50	65	QFN1.5 $\times$ 1.5-7	Power Good Indicator, Auto Discharge
SY20124LQWC	2.7	5.5	3	1.5	0.6	$\pm 1\%$	85/50	65	QFN1.5 $\times$ 1.5-7	Power Good Indicator, Auto Discharge
SY20193QWC	2.7	5.5	3	1	0.6	$\pm 1\%$	85/50	55	QFN1.5 $\times$ 1.5-7	Power Good Indicator, Light Load Mode Selection
SY20193LQWC	2.7	5.5	3	1	0.6	$\pm 1\%$	85/50	55	QFN1.5 $\times$ 1.5-7	Power Good Indicator, Light Load Mode Selection
SY20053DQC	2.4	5.5	3	2.2	0.6	$\pm 1\%$	35/25	16	DFN1.5 $\times$ 1.5-6	Power Good Indicator, Hic-cup SCP/OVP/OTP, Auto Discharge, PFM Mode
SY26023DQD	2.5	5.5	3	2.2	0.6	$\pm 1\%$	38/30	21	DFN1.5 $\times$ 1.5-6	Power Good Indicator, Hic-cup SCP/OVP/OTP, Auto Discharge
SY20054DQC	2.4	5.5	4	2.2	0.6	$\pm 1\%$	35/25	16	DFN1.5 $\times$ 1.5-6	Power Good Indicator, Hic-cup SCP/OVP/OTP, Auto Discharge, PFM Mode
SY26024DQD	2.5	5.5	4	2.2	0.6	$\pm 1\%$	38/30	21	DFN1.5 $\times$ 1.5-6	Power Good Indicator, Hic-cup SCP/OVP/OTP, Auto Discharge
SY20118ADFC	2.5	5.5	4	1	0.6	$\pm 1.5\%$	85/60	55	DFN2 $\times$ 2-8	Power Good Indicator, Hic-cup SCP, Auto Discharge
SY20212BAIC	2.6	5.5	4	1.8	/	$\pm 1\%$	70/40	80	TSOT23-8	Programmable Output Voltage: 0.7625V to 1.55V in 12.5mV Steps; Default 1.15V Output Voltage
SY20212CAIC	2.6	5.5	4	1.8	/	$\pm 1\%$	70/40	80	TSOT23-8	Programmable Output Voltage: 0.7625V to 1.55V in 12.5mV Steps; Default 1.05V Output Voltage
SY20214QDC	2.5	5.5	4	1.25	0.6	$\pm 1.5\%$	75/55	18	QFN3 $\times$ 3-16	Power Good Indicator
SY20217DQDC	2.5	5.5	4	1	/	$\pm 1\%$	70/40	30	QFN3 $\times$ 3-16	Power Good Indicator, VID control, Latch OVP/SCP/OTP, 4A Continuous, 7A Peak Load Current
SY20217FQDC	2.5	5.5	4	1	/	$\pm 1\%$	70/40	30	QFN3 $\times$ 3-16	Power Good Indicator, VID control, Latch-off OVP/SCP/OTP, 4A Continuous, 7A Peak Load Current
SY20216DFC	2.7	5.5	4	3	0.6	$\pm 1.5\%$	35/15	60	DFN2 $\times$ 2-8	Power Good Indicator



Single Output Step Down (Buck) Converter  $V_{IN}$  Max < 7V

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET (Ron H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY20904SYC	2.5	6	4	2.4	0.6	$\pm 1.5\%$ (-40~125°C)	25/17	23	DFN2 $\times$ 2-7	Auto Discharge, hic-cup SCP
SY20235QUC	2.5	5.5	5	2	0.6	$\pm 1.5\%$	55/35	18	QFN2 $\times$ 1.5-8	Power Good Indicator
SY20906SYC	2.5	6	6	1	0.6	$\pm 1.5\%$ (-40~125°C)	22/12	23	DFN2 $\times$ 2-7	Auto Discharge, hic-cup SCP
SY20218DBC	2.7	5.5	6	1	0.6	$\pm 1.5\%$	50/40	150	DFN3 $\times$ 3-10	Power Good Indicator, EXT SS
SY20228DFC	2.7 5	6	6	1.2	0.6	$\pm 1.5\%$	35/15	60	DFN2 $\times$ 2-8	Power Good Indicator, OCP/UVLO/OTP Protections
SY20246DFC	2.7	6.5	6	1.2	0.6	$\pm 1.5\%$	38/15	60	DFN2 $\times$ 2-8	Power Good Indicator, OCP/UVLO/OTP
SY20257KPKC	2.5	5.5	6	2.4		$\pm 1.5\%$	28/17	65	CSP1.56 $\times$ 1.96-20	I <sup>2</sup> C Programmable $V_{OUT}$ : 0.7125V~ 1.5V in 12.5mV steps, ADDR: 1000001x
SY20277QQC	2.7	5.5	12	1.5		$\pm 1\%$	12/6	95	QFN3 $\times$ 3-12	Programmable Output Voltage: 0.6V to 1.5V in 11mV steps
SY20183LDEC*	2.5	5.5	0.6	2.25	0.6	$\pm 1.5\%$	300/200	50	DFN2 $\times$ 2-6	
SY20018AAC*	2.5	5.5	1	1.5	0.6	$\pm 2\%$	260/170	40	SOT23-5	
SY20018LACC*	2.5	5.5	1	1.5	0.6	$\pm 2\%$	260/170	40	TSOT23-5	
SY20041DEC*	2.5	5.5	1	1.5	0.6	$\pm 1.5\%$	200/150	50	DFN2 $\times$ 2-6	
SY20051ADQC*	2.5	5.5	1	1.5	0.6	$\pm 2\%$	230/150	40	DFN1.5 $\times$ 1.5-6	
SY20061ADEC*	2.5	5.5	1	1.5	0.6	$\pm 2\%$	260/170	60	DFN2 $\times$ 2-6	Auto Discharge
SY20075LABC*	2.5	5.5	1	1.5	0.6	$\pm 2\%$	250/200	90	SOT23-6	Power Good Indicator
SY20081AAC*	2.5	5.5	1	2	0.6	$\pm 2\%$	260/170	40	SOT23-5	
SY20122BDQC*	2.5	5.5	1.5	1.5	0.6	$\pm 2\%$	210/130	60	DFN1.5 $\times$ 1.5-6	
SY20183DEC*	2.5	5.5	1.5	2.25	0.6	$\pm 1.5\%$	200/150	50	DFN2 $\times$ 2-6	Ext Mode
SY20122EABC*	2.7	5.5	2	1	0.6	$\pm 2\%$	110/80	/	SOT23-6	Power Good Indicator, Force PWM
SY20133LDFC*	2.7	5.5	2	1	0.6	$\pm 2\%$	120/90	55	DFN2 $\times$ 2-8	Power Good Indicator
SY20159PABC*	2.7	6.5	2	1	0.6	$\pm 2\%$	125/95	55	SOT23-6	Power Good Indicator, Non-latch off OVP
SY20159AAC*	2.7	6.5	2	1	0.6	$\pm 2\%$	125/95	55	SOT23-5	3A Peak Load Current
SY20149AAAC*	2.7	5.5	2	1	0.6	$\pm 2\%$	110/80	55	SOT23-5	Non Latch off Protection
SY20149AAC*	2.7	5.5	2	1	0.6	$\pm 2\%$	110/80	55	SOT23-5	Latch off Protection
SY20162ABC*	2.7	5.5	2.5	1	0.6	$\pm 2\%$	100/80	80	SOT23-6	Power Good Indicator
SY20162EABC*	2.7	5.5	2.5	1	0.6	$\pm 2\%$	100/80	/	SOT23-6	Power Good Indicator, Force CCM
SY20113DFC*	2.7	5.5	3	1	0.6	$\pm 2\%$	110/80	55	DFN2 $\times$ 2-8	Power Good Indicator, Latch SCP/OVP

\* Not recommended for new design

Single Output Step Down (Buck) Converter  $V_{IN}$  Max < 7V

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY20113EDFC*	2.7	5.5	3	1	0.6	$\pm 2\%$	110/80	-	DFN2x2-8	Power Good Indicator, Force CCM
SY20113FDFC*	2.7	5.5	3	1	0.6	$\pm 1.5\%$	110/80	/	DFN2x2-8	Power Good Indicator
SY20133GDFC*	2.7	5.5	3	1	0.6	$\pm 1.5\%$	110/80	55	DFN2x2-8	Power Good Indicator, Latch SCP/OVP
SY20194AQDC*	2.7	5.5	3	1.25	0.6	$\pm 2\%$	75/55	18	DFN3x3-16	Power Good Indicator
SY20207LQDC*	2.5	5.5	3	1.25	0.6	$\pm 2\%$	75/55	18	QFN3x3-16	Power Good Indicator
SY20153QUC*	2.5	5.5	3.5	2	0.6	$\pm 1.5\%$	55/35	18	QFN2x1.5-8	Power Good Indicator
SY20217QDC*	2.5	5.5	4	1	/	/	70/40	30	QFN3x3-16	Power Good Indicator, VID control, Latch OVP/SCP/OTP
SY20217BQDC*	2.5	5.5	4	1	/	$\pm 1\%$	70/40	30	QFN3x3-16	Power Good Indicator, VID control, Latch OVP/SCP/OTP, 4A Continuous, 7A Peak Load Current

\* Not recommended for new design

Dual Output Step Down (Buck) Converter  $V_{IN}$  Max < 7V

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY20313ADBC	2.5	5.5	1A x2	2	0.6	$\pm 2\%$	220/180	35	DFN3x3-10	Individual EN
SY20311AIC	2.5	5.5	1A x2	1.5	0.6	$\pm 2\%$	260/180	45/55	TSOT23-8	Individual EN
SY20321AIC	2.5	5.5	2A x2	2	0.6	$\pm 2\%$	125/100	35/45	TSOT23-8	Individual EN
SY20334DCC	2.7	5.5	3A x2	1.5	0.6	$\pm 2\%$	105/85	80	DFN3x3-12	Individual EN
SY20341SAC	2.5	5.5	1A/1.5A	2	0.6	$\pm 2\%$	125/100	45	DFN2x1.5-8	Individual EN
SY20341BSAC	2.3	5.5	1Ax2	2	0.6	$\pm 2\%$	125/100	45	DFN2x1.5-8	Individual EN

Single Output Step down (Buck) Converter  $16V < V_{IN}$  Max  $\leq 18V$ 

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET (Ron H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY21072IABC	4.2	18	2	0.5	0.6	$\pm 1.5\%$	130/105	200	SOT23-6	Hic-cup SCP
SY21082ABC	4.2	18	2	0.5	0.6	$\pm 1.5\%$	130/105	200	SOT23-6	Hic-cup SCP, Low ripple in PFM
SY21081B1ABC	4.5	18	2	1.4	0.6	$\pm 1.5\%$	130/105	/	SOT23-6	Hic-cup SCP, FCCM
SY21081C1ABC	4.2	18	2	1.2	0.6	$\pm 1.5\%$	130/105	250	SOT23-6	Hic-cup SCP
SY21072E1ABC	4.5	18	2	0.5	0.6	$\pm 1.5\%$	130/105	/	SOT23-6	FCCM, Hic-cup SCP
<b>NEW</b> SY21108ABT	4.5	18	3	0.5	0.6	$\pm 1.5\%$	80/40	200	SOT23-6	Hic-cup SCP
SY21113IADC	4.2	18	3	0.5	0.6	$\pm 1.5\%$	80/40	200	TSOT23-6	Hic-cup SCP
SY21113B1ADC	4.5	18	3	1.4	0.6	$\pm 1.5\%$	80/40	/	TSOT23-6	Hic-cup SCP
SY21113C1ADC	4.2	18	3	1.2	0.6	$\pm 1.5\%$	80/40	270	TSOT23-6	Hic-cup SCP, Output Auto Discharge
SY21113E1ADC	4.5	18	3	0.5	0.6	$\pm 1.5\%$	80/40	/	TSOT23-6	FCCM, Hic-cup SCP
SY21113DAIC	4.5	18	3	0.5	0.6	$\pm 1.5\%$	80/40	100	TSOT23-8	Power Good Indicator, Hic-cup SCP, EXT SS
SY21114ADC	4.2	18	3	0.5	0.6	$\pm 1.0\%$	80/40	250	TSOT23-6	Hic-cup SCP, Output auto discharge
SY21114EADC	4.2	18	3	0.6	0.6	$\pm 1.0\%$	80/40	/	TSOT23-6	Hic-cup SCP, Output auto discharge
SY21174IADC	4.2	18	4	0.5	0.6	$\pm 1.5\%$	55/36	200	TSOT23-6	Hic-cup SCP
SY21195IADC	4.5	18	5	0.5	0.6	$\pm 1.5\%$	41/27	250	TSOT23-6	
SY21197ADC	4.5	18	6	0.4	0.6	$\pm 1.0\%$	29/19	200	TSOT23-6	Output Auto Discharge, SCP
SY21164RRC	2.85	18	12	0.5/ 0.75/1/ 1.25	0.6	$\pm 1.0\%$	15/4.5	540	QFN3 $\times$ 4-14	Power Good Indicator, selectable Hic-cup/Latch-off SCP, 12A Continuous/15A Peak Current Capability, Programmable Soft-start Time
SY21712VDC	2.7	16	12	0.6/ 0.8/1	0.6	$\pm 1.0\%$ (-40~125 $^{\circ}$ C)	12.6/4.3	650	QFN3 $\times$ 4-19	Power Good Indicator, Remote sense, Seamless ILMT, Pre-bias startup, FCCM/PFM, Hic-cup SCP, Programmable Soft-start Time
SY21720VDC	2.9	16	20	0.6/ 0.8/1	0.6	$\pm 1.0\%$ (-40~125 $^{\circ}$ C)	7.5/2.4	550	QFN3 $\times$ 4-19	Power good Indicator, Remote sense, Seamless ILMT, Pre-bias startup, FCCM/PFM, Hic-cup SCP, Programmable Soft-start Time
SY21072B1ABC*	4.5	18	2	0.5	0.6	$\pm 2.0\%$	130/120	400	SOT23-6	
SY21081ABC*	4.5	18	2	1	0.6	$\pm 2.0\%$	170/160	400	SOT23-6	
SY21081BABC*	4.35	18	2	1.2	0.6	$\pm 2.0\%$	170/160		SOT23-6	1.2MHz, FCCM
SY21081CABC*	4.5	18	2	1.2	0.6	$\pm 2.0\%$	130/120	400	SOT23-6	
SY21081DEC*	4.5	18	2	1	0.6	$\pm 2.0\%$	170/160	400	DFN2 $\times$ 2-6	

\* Not recommended for new design

## Single Output Step down (Buck) Converter 16V &lt;math&gt;V\_{IN}&lt;/math&gt; Max ≤18V

Part Number	Min (V)	Max (V)	I <sub>OUT</sub> (Max) (A)	f <sub>SW</sub> (MHz)	V <sub>OUT</sub> (Min) (V)	Voltage Accuracy	MOSFET (Ron H/L) (mΩ)	Quiescent Current (μA)	Package	Feature/ Special Function
SY21113BADC*	4.5	18	3	0.5	0.6	±1.5%	80/40	100	TSOT23-6	Hic-cup SCP
SY21113CADC*	4.5	18	3	1	0.6	±1.5%	80/40	100	TSOT23-6	Hic-cup SCP
SY21113GADC*	4.5	18	3	0.5	0.6	±1.5%	80/40	100	TSOT23-6	Hic-cup SCP, FCCM
SY21174AADC*	4.5	18	4	0.5	0.6	±1.5%	50/30	100	TSOT23-6	Instant PWM architecture
SY21174ADC*	4.5	18	4	0.5	0.6	±1.5%	50/30	100	TSOT23-6	
SY21195AADC*	4.5	18	5	0.5	0.6	±1.5%	40/20	100	TSOT23-6	Instant PWM architecture
SY21195ADC*	4.5	18	5	0.5	0.6	±1.5%	50/30	100	TSOT23-6	
SY21262QCC*	4	18	12	0.2~1	0.6	±1.0%	18/6	/	QFN4×4-20	Power Good Indicator

\* Not recommended for new design

Single Output Step down (Buck) Converter 23V ≤ V<sub>IN</sub> Max ≤24V

Part Number	Min (V)	Max (V)	I <sub>OUT</sub> (Max) (A)	f <sub>SW</sub> (MHz)	V <sub>OUT</sub> (Min) (V)	Voltage Accuracy	MOSFET (Ron H/L) (mΩ)	Quiescent Current (μA)	Package	Feature/ Special Function
SY21087FAC	4.5	23	2	0.5	0.6	±1.5%	150/110	400	SO8	EXT SS, Hic-cup SCP
SY21147FCC	4.5	23	3	0.5	0.6	±1.5%	130/90	400	SO8E	EXT SS
SY21143ADC	4.5	23	3	0.5	0.6	±1.5%	105/50	100	TSOT23-6	Hic-cup SCP
SY21143AIC	4.5	23	3	0.5	0.6	±1.5%	105/50	100	TSOT23-8	Power Good Indicator, EXT SS, Hic-cup SCP
SY21144RAC	4	23	4	0.6	0.6	±1.0%	85/35	130	QFN3×3-20	Power Good Indicator, Output Discharge, SCP/OVP,UVLO
SY21145RAC	4	23	4	0.5	0.6	±1.0%	85/35	121	QFN3×3-20	Power Good Indicator, Output Discharge, SCP/OVP,UVLO
SY21145BRAC	4	23	4	0.6	Fixed 3.338	±1.0%	85/35	80	QFN3×3-20	Power Good Indicator, Output Discharge, SCP/OVP,UVLO
SY21145CRAC	5.5	23	4	0.6	Fixed 5.1	±1.0%	85/35	115	QFN3×3-20	Power Good Indicator, Output Discharge, SCP/OVP,UVLO
SY21138ARHC	4.5	24	6	0.6	0.6	±1.0%	38/19	100	QFN2.5×2.5-16	Power Good Indicator, Output Discharge, Hic-cup UVP
SY21138RHC	4.5	24	6	0.5	0.6	±1.0%	38/19	100	QFN2.5×2.5-16	Power Good Indicator, Output Discharge, Latch-off UVP/OVP/OTP
SY21138BRHC	4.5	24	6	0.6	Fixed 3.338	±1.0%	36/18	75	QFN2.5×2.5-16	Power Good Indicator, Latch-off Protection, Output Discharge
SY21138CRHC	5.5	24	6	0.6	Fixed 5.1	±1.0%	36/18	130	QFN2.5×2.5-16	Power Good Indicator, Latch-off Protection, Output Discharge
SY21243ARHC	4	24	8	0.6	0.6	±1.0%	20/10	140	QFN2.5×2.5-16	Power Good Indicator, Hic-cup UVP, Output discharge
SY21243RHC	4.5	24	8	0.5	0.6	±1.0%	30/15	100	QFN2.5×2.5-16	Power Good Indicator, Output Discharge, Latch-off UVP/OVP
SY21243BRHC	4.5	24	8	0.6	Fixed 3.338	±1.0%	30/15	75	QFN2.5×2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge

Single Output Step down (Buck) Converter  $23V \leq V_{IN}$  Max  $\leq 24V$ 

Part Number	$V_{IN}$ Min (V) Max (V)		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
SY21243BRHC	4.5	24	8	0.6	Fixed 3.338	$\pm 1.0\%$	30/15	75	QFN2.5 $\times$ 2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge
SY21243BRHC	4	24	8	0.6	Fixed 3.338	$\pm 1.0\%$	20/10	85	QFN2.5 $\times$ 2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge
SY21243CRHC	5.5	24	8	0.6	Fixed 5.1	$\pm 1.5\%$	20/10	85	QFN2.5 $\times$ 2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge
<b>NEW</b> SY21288CRHC	5.5	24	8	0.6	Fixed 5.1	$\pm 1.5\%$	20/10	96	QFN2.5 $\times$ 2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge
SY21243DRHC	4	24	8	0.5	0.6	$\pm 1\%$	20/10	140	QFN2.5 $\times$ 2.5-16	Power Good Indicator, Latch-off Protection, Auto-discharge
SY21240RAC	4	24	9	0.6	0.6	$\pm 1.0\%$	27/9	85 in S3 125 in S0	QFN3 $\times$ 3-20	Power Good Indicator, 9A continuous/14A peak current capability, Latch-off UVP/OVP, $\pm 1A$ Source/Sink Current Capability of the VTT LDO
SY21240DRAC	4	24	9	0.6	0.6	$\pm 1.0\%$	27/9	65 in S3 110 in S0	QFN3 $\times$ 3-20	Power Good Indicator, 9A Continuous/12A Peak Current Capability, Latch-off UVP/OVP, $\pm 1A$ Source/Sink Current Capability of the VDDQ LDO
SY21246BTMC	4	24	10	0.6	Fixed 3.36	$\pm 1.0\%$	18/8	85	QFN3 $\times$ 4-13	Power Good Indicator, Latch-off Protection, Auto-discharge
SY21249C1TMC	5.5	24	11	0.6	Fixed 5.15	$\pm 1.5\%$	17/7.5	110	QFN3 $\times$ 4-13	Power Good Indicator, Latch-off UVP/OVP, Output Discharge
SY21249TMC	4	24	11	0.5	0.6	$\pm 1.0\%$	17/7.5	140	QFN3 $\times$ 4-13	Power Good Indicator, Latch-off UVP/OVP, Output Discharge
<b>NEW</b> SY21249FTMC	5.5	24	11	0.6	1	$\pm 1.0\%$	17/7.5	180	QFN3 $\times$ 4-13	High Duty Cycle Capable using On-Time Stretch, Power Good Indicator, Auto-Discharge
SY21092DBC*	4.5	23	2	0.5	0.6	$\pm 1.5\%$	150/110	400	DFN3 $\times$ 3-10	Power Good Indicator, EXT SS, Hic-cup SCP
SY21123ADBC*	4.5	23	3	1	0.6	$\pm 1.5\%$	120/85	400	DFN3 $\times$ 3-10	Power Good Indicator, EXT SS
SY21133DBC*	4.5	23	3	0.5	0.6	$\pm 1.5\%$	120/85	400	DFN3 $\times$ 3-10	Power Good Indicator, EXT SS, Hic-cup SCP
SY21236GRAC*	4	23	6	0.5	0.6	$\pm 1.0\%$	38/19	120	QFN3 $\times$ 3-20	Power Good Indicator, Output Auto Discharge, Latch-off Protection
SY21236ARAC*	4	23	6	0.6	0.6	$\pm 1.0\%$	38/19	120	QFN3 $\times$ 3-20	Power Good Indicator, Output Auto Discharge, Hic-cup SCP
SY21236BRAC*	4	23	6	0.6	Fixed 3.37	$\pm 1.5\%$	38/19	75	QFN3 $\times$ 3-20	Power Good Indicator, Output Auto Discharge, Latch-off Protection
SY21236CRAC*	5.5	23	6	0.6	Fixed 5.1	$\pm 1.5\%$	38/19	108	QFN3 $\times$ 3-20	Power Good Indicator, Output Auto Discharge, Latch-off Protection
SY21248ARAC*	4	23	8	0.6	0.6	$\pm 1.0\%$	22/11	120	QFN3 $\times$ 3-20	Power Good Indicator, Output Discharge, Hic-cup SCP
SY21248BRAC*	4	23	8	0.6	Fixed 3.37	$\pm 1.5\%$	22/11	75	QFN3 $\times$ 3-20	Power Good Indicator, Output Discharge, Latch-off UVP/OVP
SY21248CRAC*	5.5	23	8	0.6	Fixed 5.1	$\pm 1.5\%$	22/11	108	QFN3 $\times$ 3-20	Power Good Indicator, Output Discharge, Latch-off UVP/OVP
SY21248RAC*	4	23	8	0.5	0.6	$\pm 1.0\%$	30/10	105	QFN3 $\times$ 3-20	Power Good Indicator, Output Discharge, Latch-off UVP/OVP
SY21247TMC*	4	23	10	0.5	0.6	$\pm 1.0\%$	28/8	100	QFN3 $\times$ 4-13	Power Good Indicator, Latch-off OVP/SCP

\* Not recommended for new design

Single Output Step down (Buck) Converter  $27V \leq V_{IN}$  Max  $\leq 30V$ 

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY21041ABC	4.5	27	1	0.5	0.6	$\pm 2.0\%$	350/150	400	SOT23-6	
SY21041CABC	4.5	27	1	1.15	0.6	$\pm 2.0\%$	350/150	400	SOT23-6	Force CCM
SY21042ADC	4.5	28	1.7	0.5	0.6	$\pm 2.0\%$	350/150	400	TSOT23-6	Cycle-by-cycle Valley Current Limitation
SY21154AIC	4.5	30	3	0.5~2.5	0.6	$\pm 1.5\%$	110/70	19	TSOT23-8	Hic-cup SCP
SY21211DNC	4.5	30	5	0.5	0.6	$\pm 1.5\%$	70/40	200	DFN3 $\times$ 4-12	Power Good Indicator, EXT SS
SY21211FCC	4.5	30	5	0.5	0.6	$\pm 1.5\%$	70/40	200	SO8E	EXT SS
SY21215QNC	4	28	6	0.8	0.6	$\pm 1.5\%$	40/20	100	QFN3 $\times$ 3-10	Power Good Indicator, Latch-off SCP/OVP, 12A Peak Current Capability, Programmable peak current limit
SY21226AQQC	4	28	6	0.8	0.6	$\pm 1.5\%$	40/20	100	QFN3 $\times$ 3-12	Power Good Indicator, Hic-cup SCP/OVP, 12A Peak current capability, programmable peak current limit
SY21215HQQC	4	28	6	0.8	0.6	$\pm 1.5\%$	40/20	100	QFN3 $\times$ 3-12	Power Good Indicator, Hic-cup SCP, 12A Peak current capability, programmable peak current limit
SY21215KQQC	4	28	6	0.5	0.6	$\pm 1.5\%$	40/20	100	QFN3 $\times$ 3-12	Power Good Indicator, Hic-cup SCP, 12A peak current capability, programmable peak current limit
SY21228AQQC	4	28	8	0.8	0.6	$\pm 1.0\%$	20/10	100	QFN3 $\times$ 3-12	Power Good Indicator, Hic-cup SCP, 16A Peak current capability, programmable output current limit
SY21228LQQC	4.5	28	8	0.5	0.6	$\pm 1.0\%$	20/10	100	QFN3 $\times$ 3-12	Power Good Indicator, OVP
SY21152FCC*	4.5	30	3	0.5	0.6	$\pm 1.5\%$	80/50	200	SO8E	Power Good Indicator, EXT SS
SY21241AQVC*	4	28	10	0.6	0.6	$\pm 1.5\%$	25/8	300	QFN4 $\times$ 3-19	Power Good Indicator, Memory power, 10A VDDQ/2A VTT LDO, 16A Peak Current capability, Latch off UVP/OVP, Over temperature alert
SY21241DQVC*	4	28	10	0.6	0.6	$\pm 1.5\%$	25/8	300	QFN4 $\times$ 3-19	Power Good Indicator, Memory power, 10A VDDQ/1A VTT LDO, 16A Peak Current capability, Latch-off UVP/OVP, Over temperature alert

# Single Output Step down (Buck) Converter $36V \leq V_{IN} \text{ Max} \leq 40V$

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY21019ABC	5	40	0.3	2	0.6	$\pm 2.0\%$	2000/-	160	SOT23-6	
SY21036ABC	4.5	40	1	2	0.8	$\pm 1.0\%$	380/180	18	SOT23-6	Hic-cup SCP
SY21061ABC	5	40	1.2	0.8	0.6	$\pm 2.0\%$	180/-	160	SOT23-6	
SY21061FABC	9	36	1.2	0.3	0.81	$\pm 2.0\%$	180/-	160	SOT23-6	
SY21102ABC	5	40	2	0.8	0.6	$\pm 2.0\%$	180/-	160	SOT23-6	
SY21163FCC	5	40	3	0.8	0.6	$\pm 2.0\%$	180/-	160	SO8E	
SY21153AAIC	4.5	40	3	0.5~2.5	0.6	$\pm 1.5\%$	110/70	18	TSOT23-8	
SY21245RBC	4	40	8	0.35/ 0.5	0.6	$\pm 1.0\%$	25/12	60	QFN3.5 $\times$ 3.5-20	Power Good Indicator, programmable soft-start & valley current limit, hic-cup SCP, selectable switching frequency

# Single Output Step down (Buck) Converter $V_{IN} \text{ Max} \geq 50V$

Part Number	$V_{IN}$		$I_{OUT}$ (Max) (A)	$f_{SW}$ (MHz)	$V_{OUT}$ (Min) (V)	Voltage Accuracy	MOSFET ( $R_{on}$ H/L) (m $\Omega$ )	Quiescent Current ( $\mu$ A)	Package	Feature/ Special Function
	Min (V)	Max (V)								
SY21031ABC	4.5	50	0.8	1.2	0.6	$\pm 1.0\%$	700/-	150	SOT23-6	
SY21142FCC	4.5	60	2	0.1~1	0.8	$\pm 1.0\%$	175/-	100	SO8E	Power Good Indicator, Hic-cup SCP, Adjustable Switching Frequency
SY21173FCC	4.5	60	3	0.1~0.5	0.8	$\pm 1.0\%$	150/-	100	SO8E	Adjustable switching frequency range: 100kHz~500kHz, hic-cup SCP
SY21052AFCC	7	85	1.2	0.2~0.5	1.2	$\pm 2.0\%$	500/240	/	SO8E	Programmable Switching Frequency /FCCM, 1.2A Continuous/1.8A Peak Output Current Capability
SY21052FCC	7	85	1.2	0.2~0.5	1.2	$\pm 2.0\%$	500/240	400	SO8E	Programmable Switching Frequency, 1.2A Continuous/1.8A Peak Output Current Capability
SY21034ADC	4.5	100	0.6	0.2	0.6	$\pm 1.0\%$	1000/-	100	TSOT23-6	Hic-cup SCP
SY21035FCC	7	100	0.6	0.2~0.6	1.225	$\pm 2.0\%$	500/285	/	SO8E	Programmable Switching Frequency
SY21051FCC	7	100	1	0.2~1	1.2	$\pm 2.0\%$	500/240	400	SO8E	Programmable Switching Frequency
SY21053FCC	7	100	1	0.2~0.6	1.225	$\pm 2.0\%$	500/240	/	SO8E	Programmable Switching Frequency
SY21034BADC	4.5	100	1.2	0.2	0.6	$\pm 1.0\%$	1000/-	100	TSOT23-6	Hic-cup SCP
SY21252FCC	4.5	100	2	0.1~1	0.8	$\pm 1.0\%$	175/-	100	SO8E	Power Good Indicator, Hic-cup SCP, Adjustable Switching Frequency
SY21253FCC	4.5	100	3	0.1~0.5	0.8	$\pm 1.0\%$	150/-	100	SO8E	Power Good Indicator, Hic-cup SCP, Adjustable Switching Frequency

## Single Output Step Up (Boost) Converter (Low Voltage)

Part Number	V <sub>IN</sub>		I <sub>LIM</sub> (A)	F <sub>SW</sub> (MHz)	V <sub>OUT</sub> (Max) (V)	Sync Boost	Fixed Output Voltage (V)	V <sub>FB</sub> / Accuracy	Quiescent Current		MOSFET R <sub>on</sub> (H/L)(mΩ)	Feature/ Special Function	Package
	Min (V)	Max (V)							Input (μA)	output (μA)			
SY20417AAC	0.7	5	0.35	/	/	✓	3.3	/	0.5	5.5	700/500	Pass-through Function@ Shutdown	SOT23-5
SY20417AAAC	0.7	5	0.35	/	/	✓	3	/	0.5	5.5	700/500		SOT23-5
SY20418AHC	0.7	5	0.35	/	5.25	✓	/	1.0V±3%	0.5	5	700/500	Pass-through Function@ Shutdown	SOT-363
SY20418AAHC	0.7	5	0.35	/	/	✓	5	/	0.5	7	500/400	Pass-through Function@ Shutdown; OVP	SOT-363
SY20492DABC	0.85	5.5	0.6	1	5.5	✓	/	0.5V±1.5%	0.7	5	170/100	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	SOT23-6
SY20419SUD	1.8	5.5	1	1	5.5	✓	/	1.2V±1.5%	/	/	125/70	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP, CCM Only	DFN2×1.5-6
SY20492AABC	0.85	5.5	2	1	5.5	✓	/	1.2V±1.5%	0.7	5	170/100	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	SOT23-6
SY20492ABC	1.8	5.5	2	1	5.5	✓	/	1.2V±1.5%	0.7	5	170/100	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	SOT23-6
SY20493SUC	0.85	5.5	2	1	5.5	✓	/	1.2V±1.5%	0.7	5	125/70	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	DFN2×1.5-6
SY20433QMC	1.8	5.25	3	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/36	Output Disconnect @Shutdown	QFN2×2-10
SY20489ADC	2.5	5.5	3	1	5.5	✓	/	1.2V±1.5%	8	32	90/50	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	TSOT23-6
SY20489BADC	2.5	5.5	3	1	5.5	✓	/	1.2V±1.5%	8	32	90/50	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	TSOT23-6
SY20489CUMC	2.5	5.5	3	1	5.6	✓	/	1.2V±1.5%	8	32	100/70	Auto Bypass Mode When V <sub>IN</sub> ≥ V <sub>OUT</sub> ; OVP	CSP1.54×0.9-6
SY20445QMC	1.8	5.25	5	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	Auto Output Discharge Function, Input Battery Voltage Monitor, OVP	QFN2×2-10
SY20445AQMC	1.8	5.25	5	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	No Output Discharge Function, Input Battery Voltage Monitor, OVP	QFN2×2-10
SY20496QMC	2	5.5	6	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	Selectable Forced PWM Mode, Programmable Output Current Limit, OVP	QFN2×2-10
SY20466QMC	1.8	5.25	6	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	Auto Output Discharge Function, Input Battery Voltage Monitor, OVP	QFN2×2-10
SY20466AQMC	1.8	5.25	6	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	No Output Discharge Function, Input Battery Voltage Monitor, OVP	QFN2×2-10
SY20466BQMC	1.8	5.25	6	0.5	5.5	✓	/	1.2V±1.5%	10	27	40/20	Selectable Forced PWM Mode, OVP	QFN2×2-10
SY20411LAHC*	0.7	5	0.2	/	5.25	✓	/	0.5V±3%	0.5	18	800/450	Pass-through Function@ Shutdown; OVP	SOT-363
SY20411AHC*	0.7	5	0.4	/	5.25	✓	/	0.5V±3%	0.5	18	800/450	Pass-through Function@ Shutdown; OVP	SOT-363
SY20428ABC*	0.9	4	1.8	1.2	4	✓	/	1.2V±3%	65	/	200/90	Output Disconnect @Shutdown	SOT23-6
SY20508DGC*	2.3	5.25	3	1	5.5	✓	/	1.2V±1.5%	2	30	85/70	OVP	DFN2×3-8
SY20508EDGC*	2.3	5.25	3	1	5.5	✓	/	1.2V±1.5%	/	/	85/70	FCCM, OVP	DFN2×3-8

\* Not recommended for new design



## Single Output Step Up (Boost) Converter (High Voltage)

Part Number	V <sub>IN</sub>		I <sub>LIM</sub> (A)	F <sub>SW</sub> (MHz)	V <sub>OUT</sub> (Max) (V)	Sync Boost	V <sub>FB</sub> / Accuracy	Input Quiescent Current (μA)	MOSFET (Ron H/L) (mΩ)	Feature/ Special Function	Package
	Min (V)	Max (V)									
SY21199CABC	3	25	0.6	1	25		0.6V±2%	100	-/150	Internal SS/Comp	SOT23-6
SY21212AABC	3	8	2	1	16		0.6V±2%	100	-/130	Internal SS/Comp	SOT23-6
SY21218LABC	3	25	2	1	25		0.6V±2%	100	-/150	Internal SS/Comp	SOT23-6
SY21222ABC	3	33	2	1	33		0.6V±2%	100	-/200	Internal SS/Comp	SOT23-6
SY21238ABC	3.5	30	2	0.85	30		1V±2%	150	-/200	Accurate input current limit	SOT23-6
SY21242ABC	2	6	2.5	1	6		0.6V±2%	200	-/120	Internal SS/Comp	SOT23-6
SY21264ADBC	2	6	4	1	6		0.6V±2%	100	-/90	Internal SS/Comp	DFN3×3-10
SY21275DBC	8.6	15.9	4.5	0.5	16		1.25V±1.5%	120	-/75	Adjustable soft-start time, OVP	DFN3×3-10
SY21282QDC	3	9	6	1	13	✓	1V±2%	600	40/80	Power Good Indicator, Integrated 40mΩ Disconnection FET, True Shutdown	QFN3×3-16
SY21299DBC	3	5.5	9	/	36		1.25V±2%	380	-/65	EXT Comp	DFN3×3-10
SY21305ARDC	3	16	15	0.25~1	16	✓	1V±1.5%	230	12/9	Power Good Indicator, Integrated 12mΩ Disconnection FET, Internal SS, OVP/SCP/ True shutdown Programmable Switching Frequency: 0.25~1MHz	QFN4×4-18
SY21314DBC	3	33	4	1	33		0.6V±2%	100	-/120		QFN3×3-10
SY21225RDC	4.5	30	15	0.2~1	30	✓	1V±1.5%	230	18/16	Integrated 18mΩ Disconnect ion FET, OVP/OTP/SCP, True Shutdown, Programmable Switching Frequency: 0.2~1MHz, Power Good Indicator	QFN4×4-18
SY21306RAC	2.8	16	2~10	0.3~2	16	✓	1V±1%	200	20/10	PFM/PWM light load operation mode, Programmable Switching Frequency: 0.3~2MHz, Programmable I <sub>LIM</sub> : 2~10A, OVP	QFN3×3-20

## DC-DC PWM Controller (External Switch)

Part Number	V <sub>IN</sub>		F <sub>SW</sub> (MHz)	V <sub>REF</sub> (V)	Function	Package
	Min(V)	Max(V)				
SY21401DBC	3	25	0.5	1	Current mode DC/DC controller targeted for Boost, SEPIC, Flyback and Forward applications with DC Input Current Limit	DFN3×3-10
SY21412AFHC	3	25	0.3	1	Current mode DC/DC controller targeted for both Boost and SEPIC applications with DC Output Current Limit	SOP10

## Step Up/Down Regulator (Power Switch Integrated)

Part Number	V <sub>IN</sub>		I <sub>LIM</sub> (A)	F <sub>SW</sub> (MHz)	V <sub>OUT</sub> (max) (V)	V <sub>FB</sub> / Accuracy	Input Quiescent Current (μA)	MOSFET Ron (H/L) (mΩ)	r <sub>PC</sub>	Feature/ Special Function	Package
	Min (V)	Max (V)									
SY20518QOC	2.6	5.5	2	1	3.8	0.6V±1.5%	60	50/50		Output Disconnect @Shutdown	QFN2×3-13
SY20516ADPC	2.6	5.5	1.2	1	3.8	0.6V±1.5%	60	100/100		Output Disconnect @Shutdown	DFN3×3-14
SY21612QFC	4	28	Programmable 6A/8A/10A	0.25/0.5/ 0.75/1	28	adjustable	310	25/25	√	Selectable Inductor Current Limit and VBUS Output Current Limit Selectable VBUS Output Voltage:5V, 7V, 9V, 12V, 15V, 20V	QFN4×4-32
SY21612BQFC	4	28	Programmable 6A/8A/10A	0.25/0.5/ 0.75/1	28	adjustable	310	25/25	√	Selectable Inductor Current Limit and VBUS Output Current Limit Selectable VBUS Output Voltage:5V, 9V, 10V, 12V, 15V, 20V	QFN4×4-32
SY21612CQFC	4	28	Programmable 6A/10A	0.25/0.5	28	1V±1.5%	300	25/25		Programmable Output Current Limitation with Ext. Sensing Resistor	QFN4×4-32
SY21618QEC	4	28	Programmable 6A/8A/10A	0.25/0.5/ 0.75/1	28	adjustable	450	19/19		VBUS Output Voltage can be Configured in 0.1V per Step from 3.6V to 21V Selectable Inductor Current Limit and Output Current Limit	QFN5×5-32

## LDO Regulator

Part Number	V <sub>IN</sub> (Min)(V)	V <sub>IN</sub> (Max)(V)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	Dropout Voltage (mV)	Package	Function
SY20714AAC	3.6	30	3.3	0.05	100	SOT23-5	Reverse Blocking Function
SY20704DEC	2.3	30	Adjustable	0.15	300	DFN2×2-6	Reverse Blocking Function
SY20704AAC	2.3	30	Adjustable	0.15	300	SOT23-5	Reverse Blocking Function
SY20704ZDED	2.5	30	Adjustable	0.15	150	DFN2×2-6	LDO Reg.
SY20725AAC	4	40	Adjustable	0.3	300	SOT23-5	LDO Reg.
SY20733BSCC	0.8	5.5	Adjustable	0.5	90	DFN1.2×1.2-6	Current Limiting Protection, Auto-discharge
SY20731DSC	1.6	5.5	Adjustable	1	0.32V @ I <sub>OUT</sub> =1A, V <sub>OUT</sub> =1.5V 0.18V @ I <sub>OUT</sub> =1A, V <sub>OUT</sub> =2.8V	DFN3×3-6	Current Limiting Protection, Auto-discharge
SY20731BAJC	1.6	5.5	3.3	1	200	SOT223	Current Limiting Protection
SY20728JBC	3	18	Adjustable	3	0.48V @ I <sub>OUT</sub> =3A	TO252-5	Zero-current Shutdown Mode, Output Short Circuit Protection
SY20728MAC	3	18	Adjustable	3	0.48V @ I <sub>OUT</sub> =3A	TO263-5	Zero-current Shutdown Mode; Output Short Circuit Protection
SY20728BMAB	3	18	Adjustable	3	0.48V @ I <sub>OUT</sub> =3A	TO263-5	Zero-current Shutdown Mode
SY20703MAC	3	55	Adjustable	3	0.45V @ Full Load 3A	TO263-5	Zero-current Shutdown Mode Over Input Voltage Protection
SY20703BMAB	3	55	Adjustable	3	0.45V @ Full Load 3A	TO263-5	Zero-current Shutdown Mode
SY20735DBC	2.375	3.5	Adjustable	3	/	DFN3×3-10	Sink and Source DDR Termination Regulator
SY20735BTDD	2.375	3.5	Adjustable	2	/	DFN2×2-10	Sink and Source DDR Termination Regulator

Part Number	Package	Enable Logic	OCP	OVP	No. of Channels	V <sub>IN</sub> (V)	I <sub>OUT</sub> (A)	R <sub>DS(ON)</sub> (mΩ)	Special Function
SY20808AAAC	SOT23-5	H	√		1	2.5~5.5	0.6	80	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808BAAC	SOT23-5	L	√		1	2.5~5.5	0.6	80	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20814PDC	CSP0.9×0.9-4	H			1	1.05~1.95	1	45@V <sub>IN</sub> =1.2V 35@V <sub>IN</sub> =1.8V	Auto output cap discharge function, ultra low input voltage
SY20815PRC	CSP0.79×0.79-4	H		√	1	2.5~6	1	96	Precise clamping output voltage
SY20804AFAC	SO8	H	√		1	4.5~18	1.2	110@V <sub>IN</sub> =12V	Programmable blanking time for DFF control, Default Off when EN ON
SY20804FAC	SO8	H	√	√	1	4.5~18	1.2	110@V <sub>IN</sub> =12V	Programmable blanking time for DFF control, Default On when EN ON
SY20815BPRC	CSP0.79×0.79-4	H			1	1.8~5.5	1.5	80	Independent ON/OFF Control Input
SY20812DAAT	SOT23-5	H	√		1	2.5~5.5	0.1~2	65	Programmable current limit, reverse blocking
SY20812AAAC	SOT23-5	H	√		1	2.4~5.5	0.4~2	63	Programmable current limit, reverse blocking
SY20801AAAC	SOT23-5	L	√		1	2.4~5.5	0.4~2	63	Programmable current limit, reverse blocking
SY20808C20AAC	SOT23-5	H	√		1	2.5~5.5	2	65	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808D20AAC	SOT23-5	L	√		1	2.5~5.5	2	65	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20829ADFC	DFN2×2-8	H		√	1	3~23	2	100	Fixed internal OVP@7.1V, Thermal Shutdown Protection & Auto Recovery
SY20829BDFC	DFN2×2-8	H		√	1	3~23	2	100	Programmable OVP Threshold Thermal Shutdown Protection & Auto Recovery
SY20828ABC	SOT23-6	H		√	1	3~23	2	100	Programmable OVP Threshold Thermal Shutdown Protection & Auto Recovery
SY20807CABC	SOT23-6	H	√		1	2.5~5.5	2	65	TUV/CB, UL Certificate
SY20807BDEC	DFN2×2-6	L	√		1	2.5~5.5	0~2	65	High accurate programmable current limit, reverse blocking
SY20807CDEC	DFN2×2-6	H	√		1	2.5~5.5	0~2	65	High accurate programmable current limit and reverse blocking, TUV/CB, UL Certificate
SY20807ZDEC	DFN2×2-6	H	√		1	2.5~5.5	2	65	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20807LABC	SOT23-6	H	√		1	2.5~5.5	2	65	Adjustable Current Limit up to 2.0A, OCP/OTP with Latch Off Function
SY20806APAC	CSP0.78×0.78-4	H			1	1.05~5.5	2	37@V <sub>IN</sub> =5V 38@V <sub>IN</sub> =3.3V 43@V <sub>IN</sub> =1.8V	load switch with controlled slew rate
SY20806GPAC	CSP0.78×0.78-4	L			1	1.05~5.5	2	37@V <sub>IN</sub> =5V 38@V <sub>IN</sub> =3.3V 43@V <sub>IN</sub> =1.8V	Load Switch with Controlled Slew Rate
SY20815APRC	CSP0.79×0.79-4	H			1	1.8~5.5	2	95	Ultra low quiescent current for IoT application
SY20808C7AAC	SOT23-5	H	√		1	2.5~5.5	2.5	70	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808D7AAC	SOT23-5	L	√		1	2.5~5.5	2.5	70	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808C5CAC	MSOP8	H	√		1	2.5~5.5	2.5	70	Output discharge at shutdown Reverse Blocking, OCB indicator

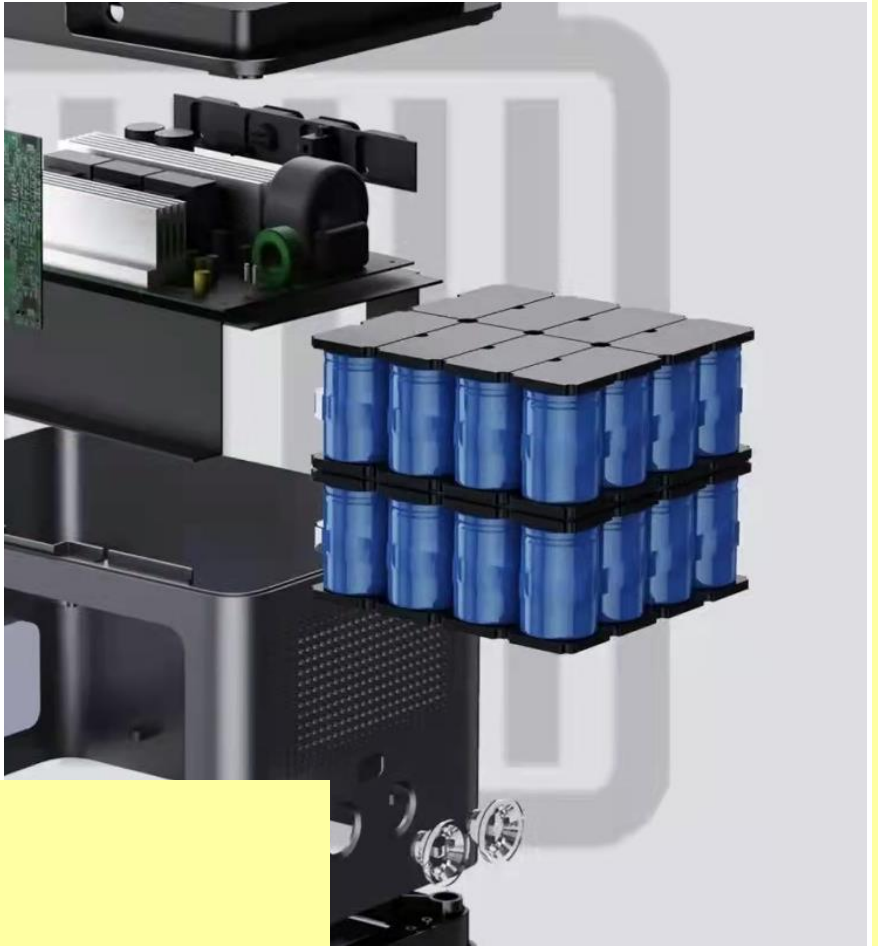
## Protection Switch

Part Number	Package	Enable Logic	OCP	OVP	No. of Channels	V <sub>IN</sub> (V)	I <sub>OUT</sub> (A)	R <sub>DS(ON)</sub> (mΩ)	Special Function
SY20808D5CAC	MSOP8	L	✓		1	2.5~5.5	2.5	70	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20809LACC	TSOT23-5	H	✓		1	2.4~6	2.5	80	Programmable Current limit
SY20812CAAT	SOT23-5	H	✓		1	2.5~5.5	0.1~2.5	65	Programmable current limit, reverse blocking
SY20808F3ABC	SOT23-6	H	✓		1	2.5~5.5	0~3	45	programmable current limit and reverse blocking
SY20808E1AAC	SOT23-5	H	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808E2AAC	SOT23-5	L	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20808F2ABC	SOT23-6	L	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20809ACC	TSOT23-5	H	✓		1	2.4~6	3	50	Output discharge at shutdown Reverse Blocking, OCB indicator
SY20803ADRC	DFN1.2×1.6-4	H	✓		1	2.5~5.5	3	60	Output discharge at shutdown Reverse Blocking
SY20803DRC	DFN1.2×1.6-4	H	✓		1	2.5~5.5	3	60	Reverse blocking output, ultra low input voltage
SY20813PEC	6 ball CSP	H			1	1.2~5.5	3	22	Auto output cap discharge function
SY20813APEC	6 ball CSP	H			1	1.2~5.5	3	22	No output cap discharge function
SY20822AAC	SOT23-5	H			1	0.6~3.6	3	45	Programmable turn-on delay, Automatic shutdown discharge
SY20861A1AAC	SOT23-5	H	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator, UL Certificate
SY20861B1ABC	SOT23-6	H	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator, UL Certificate
SY20861A2AAC	SOT23-5	L	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator, UL Certificate
SY20861B2ABC	SOT23-6	L	✓		1	2.5~5.5	3	45	Output discharge at shutdown Reverse Blocking, OCB indicator, UL Certificate
SY20821B2ABC	SOT23-6	L	✓	✓	1	2.5~5.5	3	45	Support Fast Role Swap, OCB, Reverse Block up to 28V, TUV/CB, UL Certificate
SY20821B3ABC	SOT23-6	H	✓	✓	1	2.5~5.5	3	45	Support Fast Role Swap, OCB, Reverse Block up to 28V, TUV/CB, UL Certificate
SY20821B4ABC	SOT23-6	L	✓	✓	1	2.5~5.5	3	45	Support Fast Role Swap, OCB, Reverse Block up to 28V, TUV/CB, UL Certificate
SY20802UGC	CSP1.50×1.64-12	H	✓	✓	1	3~18	3	45	OCP/TSD/OVP Protection; Auto-recovery; Programmable current limit, Reverse blocking
SY20802BUGC	CSP1.50×1.64-12	H	✓	✓	1	3~18	3	45	OCP/TSD/OVP Protection; Auto-recovery; Programmable current limit
SY20822ADQC	DFN1.5×1.5-6	H			1	0.6~3.6	4	16	Programmable turn-on delay & Automatic shutdown discharge
SY20823DFC	DFN2×2-8	H			2	0.6~5.5	4	28	Programmable turn-on delay & ramp-up time, integrated OTP SCP
SY20834DBC	DFN3×3-10	H	✓	✓	1	2.5~30	4	50	Programmable soft-start & current limit, 3.3V/5V/12V selectable clamping output
SY20805PLC	CSP1.73×1.73-12	H		✓	1	2.5~30	5	R <sub>PWPT</sub> =53mΩ (typ.)	Programmable OVP with Integrated Reverse Blocking FET, accurate current level indicator

Part Number	Package	Enable Logic	OCP	OVP	No. of Channels	V <sub>IN</sub> (V)	I <sub>OUT</sub> (A)	R <sub>DS(ON)</sub> (mΩ)	Special Function
SY20845ADBC	DFN3×3-10	H	√	√	1	2.5~30	5	40	Programmable soft-start & current limit, 3.3V/5V/12V selectable clamping output
SY20845CDBC	DFN3×3-10	H	√	√	1	2.5~30	5	40	Programmable soft-start & current limit, 3.3V/5V/12V selectable clamping output
SY20845DDBC	DFN3×3-10	H	√	√	1	2.5~30	5	40	Programmable soft-start & current limit, 3.3V/5V/9V selectable clamping output
SY20845FDBC	DFN3×3-10	H	√	√	1	2.5~30	5	50	Programmable soft-start & current limit, 3.3V/5V/12V selectable clamping output
SY20855ADBC	DFN3×3-10	H	√	√	1	2.5~12	5	40	Fixed Current Limit, Prog. SS
SY20855CDBC	DFN3×3-10	H	√	√	1	2.5~12	5	40	Fixed Current Limit, Prog. SS
SY20827PYC	CSP0.89×1.43-6	H		√	2	2.5~25	5	30	Programmable Over Voltage Threshold
SY20816AQLC	QFN3×4-16	H	√	√	2	HV: 4.5~23 5V: 4~5.5	HV: 5A 5V: 3A	35 (HV Power Path) 50 (5V Power Path)	I <sup>2</sup> C Interface, 2 to 1 Power MUX, Fast Role Swap
SY20816BQLC	QFN3×4-16	H	√	√	2	HV: 4.5~23 5V: 4~5.5	HV: 5A 5V: 3A	35 (HV Power Path) 50 (5V Power Path)	I <sup>2</sup> C Interface, 2 to 1 Power MUX, Fast Role Swap, Programmable Over Current Response Time for HV/5V Power Path, RVS_Mask bit
SY20816CQLC	QFN3×4-16	H	√	√	2	HV: 4.5~23 5V: 4~5.5	HV: 5A 5V: 3A	35 (HV Power Path) 50 (5V Power Path)	I <sup>2</sup> C Interface, 2 to 1 Power MUX, Fast Role Swap, Programmable Over Current Response Time for HV/5V Power Path, , RVS_Mask bit
SY20820CPGC	CSP1.8×2-12	H		√	1	2.5~28	5A continuous, 8A peak	38	Fixed internal OVP@6.8V, Reverse block, Surge protection up to 80V
SY20820APGC	CSP1.8×2-12	H		√	1	2.5~28	5A continuous, 8A peak	38	Programmable Over Voltage Threshold from +4V to +7V
SY20825PTC	CSP1.32×1.86-12	H		√	1	2.5~28	Programmable 5A	R <sub>PWPT</sub> =32mΩ (typ.)	Programmable Over Voltage Threshold from +4V to +22V
SY20819ERYC	QFN2×2-9	H	√		1	2.95~6.5	5	30	Selectable Clamping Output Voltage
SY20818RYC	QFN2×2-9	H	√		1	2.7~5.5	5	30	Programmable high current limit, reverse blocking, VIN state indicate, Selectable Clamping Output
SY20817ATLC	QFN2×2-12	H	√		1	2.5~16	1~5	30	Programmable OUT Slew Rate
SY20824BQDC	QFN3×3-16	H	√	√	1	4~60	5	40	OCP/TSD/OVP Protection, Auto-recovery, Programmable Output Voltage Clamping
SY28876AQSC	QFN3×4-20	H	√	√	1	2.7~18	0.6~5.3	42	True reverse blocking, programmable current limit & dV/dt control, power good and fault outputs
SY20826DUC	DFN3×2-14	H	√		2	0.8~5.5	6	18	Dual-channel, Programmable soft-start time
SY20810DHC	DFN2×3-10	H			1	0.6~5.5	10	2.8	Controlled and Adjustable Slew Rate through C <sub>SST</sub> , PG Indicator
SY20877AWPQ	QFN1.5×2-10	H			1	0.285~5.5	10	5.3	Auto Output Discharge

## Supervisor & Reset ICs

Part Number	Package	Number of Supplies Monitored	Output Driver/ Reset Output	Threshold Voltage (V)	Delay Time (ms)	Reset Threshold Accuracy	Quiescent Current ( $\mu\text{A}$ )	Features
SY20867ADTD	DFN1.45 $\times$ 1-6	1	Active high, Push-pull	Adjustable	Programmable	$\pm 1\%$	9	EN ON delay time programmable
SY20867EDTD	DFN1.45 $\times$ 1-6	1	Active high, open drain	Adjustable	Programmable	$\pm 1\%$	9	EN ON delay time programmable
SY20867FDTC	DFN1.45 $\times$ 1-6	1	Active high, open drain	Adjustable	Programmable	$\pm 1\%$	9	200ns EN ON delay time



# Battery Management

## Switching Charger

Part Number	Function	Package	V <sub>IN</sub> (V)	Max. Charge Current (A)	F <sub>SW</sub> (MHz)	Series Cells	Cell Voltage	Special Function
SY20717FAC	Single-Cell High Efficiency Switching Charger	SO8	4~16	1.2	0.8	Single Cell	4.1V	Adaptive Input Current Limit
SY20717BFAC	Single-Cell High Efficiency Switching Charger	SO8	4~16	1.5	0.8	Single Cell	4.2V	Adaptive Input Current Limit
SY20716D1PPC	Single-Cell with USB-OTG	CSP1.93x2.05-20	4~6	1.25/1.55	3	Single Cell	3.5~4.44V	Compliance with USB and USB OTG
SY20752AQIC	Single-cell Charger Step Down Reg.	QFN4x4-16	4~23	2	0.8	Single Cell	4.2V, 4.35V	Power Path Management and Adaptive Input Current Limit
SY20752CDCC	Single-cell Charger Step Down Reg.	DFN3x3-12	4~23	2	0.8	Single Cell	4.2V, 4.35V	Power Path Management and Adaptive Input Current Limit
SY20752BFCC	Single-cell Charger Step Down Reg.	SO8E	4~23	2	0.8	Single Cell	4.2V, 4.35V	Adaptive Input Current Limit
SY20752B1FCC	Single-cell Charger Step Down Reg.	SO8E	4~23	2	0.8	Single Cell	4.1V, 4.4V	Adaptive Input Current Limit
SY20718EQDC	Single-cell Battery Power Bank Charger	QFN3x3-16	4.7~5.5	2	0.5	Single Cell	4.25V, 4.4V	Prog. Current Limit, 2.5A Boost
SY20718CQDC	Single-Cell Bi-directional Power Bank	QFN3x3-16	4.5~5.35	2.5	0.5	Single Cell	4.2V, 4.35V	Prog. Current Limit, 2.5A Boost
SY20718GQDC	Single-cell Battery Power Bank Charger	QFN3x3-16	4.5~5.35	2.5	0.5	Single Cell	4.2V, 4.35V	Prog. Current Limit, 4.75V Boost
SY20719QCC	Single Cell NVDC Switching Charger	QFN4x4-24	3.9~6	2.5	1.5	Single Cell	3.5~4.4V	I <sup>2</sup> C Control, USB OTG, Power Path Management
SY20741QDC	Multi-cell Charger Step Down Reg.	QFN3x3-16	4~14	2.5	0.5	1-2 Cells	4.2V, 4.35V	Adaptive input current limit, Blocking FET integrated
SY20741BQDC	Multi-cell Charger Step Down Reg.	QFN3x3-16	4~14	2.5	0.5	1-2 Cells	4.1V, 4.25V	Adaptive input current limit, Blocking FET integrated
SY20741CQDC	Multi-Cell Li-Ion Battery Charger	QFN3x3-16	4~13	2.5	0.5	1-2 Cells	4.1V, 4.2V	Adaptive Input Power Limit, Blocking FET integrated
SY20751TYC	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-26	4.5~5.7	3	0.35	Single Cell	4.2V/4.35V/4.4V	dual output data port, adjustable battery level indication
SY20751BTYC	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-26	4.5~5.7	3	0.35	Single Cell	4.2V, 4.35V, 4.4V	dual output data port, adjustable battery level indication, 5% low power alarm
SY20743QCC	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~13.5	3	1.5	Single Cell	3.856~4.624V, step 32mV	NVDC power path management, OTG
SY20743BQCC	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~13.5	3	1.5	Single Cell	3.856~4.624V, step 32mV	NVDC power path management, OTG, BC1.2 compliance
SY20743CQCQ	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~13.5	3	1.5	Single Cell	3.856~4.624V, step 32mV	NVDC power path management, OTG, Default Input OVP 14V
SY20774BQCQ	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~14	5	1.5	Single Cell	3.84~4.608V, step 32mV	NVDC power path management, OTG, BC1.2 compliance, Default HVTYPE=12V



Part Number	Function	Package	V <sub>IN</sub> (V)	Max. Charge Current (A)	F <sub>sw</sub> (MHz)	Series Cells	Cell Voltage	Special Function
SY20774DQCQ	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~14	5	1.5	Single Cell	3.84~4.608V, step 32mV	NVDC power path management, OTG, BC1.2 compliance, Default HVTYPE=9V
SY20744VKS	Single Cell Li-Ion/Li-polymer DC/DC Switching Charger	CSP 2.2×2.565-30	3.8~14	2	1.5	Single Cell	4.0-4.5V, step 10mV	Extremley low Iq, NVDC power path management, OTG, dual-channel LDO
SY20764QDC	High Current Step-down Charger	QFN3x3-16	4~14	3.5	0.5	1-2 Cells	4.2V, 4.35V	Adaptive input current limit, Blocking FET integrated
SY20764BQDC	High Current Step-down Charger	QFN3x3-16	4~14	3.5	0.5	1-2 Cells	4.25V, 4.4V	Adaptive input current limit, Blocking FET integrated
SY20753QYC	Single-Cell Bi-directional Power Bank	QFN4x4-20	4~13.5	5	0.3, 0.5	Single Cell	4.1V, 4.2V, 4.35V, 4.4V	I <sup>2</sup> C controlled, USB and Protocol IC Compliance, 20W Boost
SY20759QEQ	2 ports Single-Cell Bi-directional Power Bank	QFN5x5-32	4~13.5	8	0.26, 0.34, 0.42, 0.5	Single Cell	4.1V, 4.2V, 4.35V, 4.4V	Dual ports, Bi-direction for USB-C, I <sup>2</sup> C, ADC, BC1.2, 28W Boost
SY20798QEQ	22.5W PD3.0 3IN1 Single Cell Power Bank	QFN5x5-32	4.6~13	5	Programmable	Single Cell	4.2V, 4.35V	USB Type-C DRP support, PD3.0, QC3.0/SCP compliance, Battery Fuel Gauge Indicator, 22.5W output power
SY20757VCC	3IN1 Single-Cell Bi-directional Power Bank	QFN5x5-34	4.6~13.2	5	Programmable	Single Cell	4.2V, 4.35V, 4.4V	QC3.0, AFC/FCP compliance, Battery Fuel Gauge Indicator
SY20754QCC	Single-Cell Bi-directional Power Bank	QFN4x4-24	4~13.5	5	0.5	Single Cell	4.1V, 4.2V, 4.35V, 4.4V	I <sup>2</sup> C controlled, USB Compliance, 5V/3A&12V/1.2A Boost
SY20763QDC	3-cell Synchronous Boost Li-Ion Battery Charger	QFN3x3-16	3.6~12.8	1	0.5	3 Cells	4.2V, 4.35V	Prog. Charge Current & Timer, Adaptive Input Current Limit
SY20761QDC	2-cell Synchronous Boost Li-Ion Battery Charger	QFN3x3-16	3.6~5.5	1.2	1	2 Cells	4.1V, 4.2V, 4.35V, 4.4V	Prog. Charge Current & Timer, Adaptive Input Current Limit
SY20762NQDC	Two-Cell Boost Li-Ion Battery Charger With System Power Path Management	QFN3x3-16	3.6~5.5	1.5	1	2 Cells	8.4V	System Power Path Management; External Separated Control for Boost and BATFET
SY20762EQDC	2 cell Boost Li-Ion Battery Charger	QFN3x3-16	3.6~5.5	2	1	2 Cells	4.2V, 4.35V	Prog. Charge Current & Timer, Adaptive Input Current Limit
SY20762E1QDC	2 cell Boost Li-Ion Battery Charger	QFN3x3-16	3.6~5.5	2	1	2 Cells	4.25V, 4.4V	Prog. Charge Current & Timer, Adaptive Input Current Limit
SY20762FQDC	2 cell Boost Li-Ion Battery Charger	QFN3x3-16	3~5.5	2	1	2 Cells	4.2V	Prog. Charge Current & Timer, Adaptive Input Current Limit
SY20765QDC	2-cell Boost Li-Ion Battery Charger	QFN3x3-16	3.6~5.5	2	1	2 Cells	4.2V, 4.35V	Prog. Charge Current & Timer, Cell Balance Control
SY20779CQFQ	Multi-Cell Synchronous Buck-Boost Battery Charger Controller	QFN4x4-32	3.5~25	8.128	0.8/1.2	1-4 Cells	1.024~19.2V	NVDC Power Path Management, DPM, OTG
SY20776DQFQ	Multi-Cell Synchronous Buck-Boost Battery Charger Controller	QFN4x4-32	3.5~25	8.128	0.8/1.2	1-4 Cells	1.024~19.2V	NVDC Power Path Management, DPM, OTG

## Switching Charger

Part Number	Function	Package	V <sub>IN</sub> (V)	Max. Charge Current (A)	F <sub>SW</sub> (MHz)	Series Cells	Cell Voltage	Special Function
SY20761BQDC	2-cell Boost Li-Ion Battery Charger	QFN3x3-16	3.6~5.5	2	1	2 Cells	4.1V,4.2V,4.25V,4.35V	Prog. Charge Current&Timer, Adaptive Input Current Limit
SY20766RAC	2-cell Boost Li-Ion Battery Charger	QFN3x3-20	3.6~5.5	1.6	0.5	2 Cells	4.1V,4.2V, 4.35V	Prog.Charge Current&Timer, Cell Balance&Limit Control, NTC JEITA Compliance
SY20778QYC	Synchronous Boost converter with QC3.0	QFN4x4-20	2.7~4.5	/	0.3, 0.5	Single Cell	/	QC3.0 Compliance
SY20783QIC	2-4 cells Li-Ion synchronous Buck charger	QFN3x3-18	4~28	2	0.5	2-4 Cells	4.1V,4.2V,4.35V	Prog. Input Current Limit, Thermal Regulation, NTC JEITA Compliance
SY20794VWS	USB Type-C Port PD Controller	CSP1.29×1.25-9	3~5.5	/	/	/	/	Support TCPC, Support DFP/UFP/DRP, Support VCONN, Support PD3.0,Support VBUS Detect
SY20743GQCQ	Single Cell Li-Ion DC/DC Switching Charger	QFN4x4-24	3.9~13.5	3	1.5	Single Cell	3.8~4.61V, step 25mV	NVDC power path management, OTG, BC1.2 compliance
SY20744BVKS	Single Cell Li-Ion/ Li-polymer DC/DC Switching Charger	CSP 2.2×2.565-30	3.8~14	2	1.5	Single Cell	4.0-4.5V, step 10mV	Extremley low Iq, NVDC power path management, OTG, dual-channel LDO
SY20748BQCQ	Single Cell Li-Ion DC-DC Switching Charger	QFN4*4-24(WB)	3.9~13.5	3	1.5	Single Cell	3.856V~4.624V, step 32mV	NVDC Power Path Management, OTG, BC1.2 Compliance, USB Source Detection
SY20777QCQ	Single Cell Li-Ion DC-DC Switching Charger	QFN4*4-24(RDL+WB)	3.9~14	5	1.5	Single Cell	3.84V~4.624V, step 16mV	NVDC Power Path Management, OTG, BC1.2 Compliance, USB Source Detection
SY20767WFS	Single Cell Li-Ion DC-DC Switching Charger with LED driver	CSP3.2*2.8-42	3.9~14	4	0.5, 1, 1.5, 2	Single Cell	3.84V~4.856V, step 8mV	NVDC Power Path Management,OTG,USB Source Detection, Charging Protocol, 2-channel 1.5A LED driver
SY20743GQCQ	Single Cell Li-Ion DC-DC Switching Charger	QFN4*4-24(RDL+WB)	3.9~13.5	3	1.5	Single Cell	3.8V~4.1V, step 25mV; 4.1V~4.61V, step 10mV;	th Management, OTG, BC1.2 Compliance, USB Source Detection
SY20747AQAQ	SMBus Controlled 1-4 Cell Battery Charger Controller	QFN4*4-28(WB)(P0.40)	4.5~24	16.256	0.6, 0.8, 1	1~4	1.024V-19.2V, step 16mV	High Accuracy for Voltage/Current Regulation, Accurate Power/Current Monitor,PROCHOT for CPU Throttling,Energy Star Low Iq

## Fast Charge

Part Number	Function	Package	ADC	V <sub>IN</sub> (V)	Typical Output Current(A)	F <sub>SW</sub> (kHz)	MOSFET Peak Current(A)	Support Protocol	Protection
SY24510UIC	High Efficiency Single Phase 2:1 Switched Capacitor Converter	CSP2.57x3.71-34	NO	4.5~20	2	125~1000	14.5	No	OCP, OTP, OVP
SY20797CVLS	8A dual phase switched capacitor battery charger with ADC	CSP3.03x3.34-56	Yes	3.5~12	8	250~1000	16	No	OCP, OVP, OTP, UCP, VDR

## BMS

Part Number	Description	Package	V <sub>IN</sub> (V)	Series Cells	Protection Mode
SY20789QEQ	3 to 6 Series Cell Battery Monitor, Balance, Protection for Li-ion and Phosphate Application	QFN5×5-32	30	3-6 Cells	OCD、SCD、OV、UV
SY20785QHQ	6 to 12 Series Cell Battery Monitor, Balance, Protection for Li-ion and Phosphate Application	QFN6×6-40	60	6-12Cells	OCD、SCD、OV、UV
SY20784RJQ	9 to 18 Series Cell Battery Monitor, Balance, Protection for Li-ion and Phosphate Application	QFN8×8-64	90	9-18Cells	OCD、SCD、OV、UV

## Gauge IC

Part Number	Functions	Cell Chemistry	Package	Series Cells	Communication Interface	Operating Temperature Range (°C)	Special Functions
SY24561DFC	Cost-save Single Cell Li+ Battery Gauge IC	li-ion	DFN2×2-8	Single Cell	I <sup>2</sup> C	-20 to 60	Eliminate Current Sense Resistor



**PMIC**

Part Number	V <sub>IN</sub> (Min) (V)	V <sub>IN</sub> (Max) (V)	Number of Channels	Package	Application	Integrated Function
SY21525AVCS	2.5	5.5	1	WLCSP 2.66×3.89-54	Smart Phones, Tablets	4 integrated power stages and each phase has the capability to deliver up to 5A totally 20A continuous output current.
SY21525BVCS	2.5	5.5	4	WLCSP 2.66×3.89-54	Smart Phones, Tablets	4 integrated power stages and each phase has the capability to deliver up to 5A continuous output current.
SY21523CPZC	2.8	5.5	5 Chs Buck+2 Chs LDO	CSP3.23×3.23-52	SSD	5 Chs Buck(2Ch can work LSW), 2Ch LDO. 3.4MHz I2C, Hardware sleep control; Reset output; Auto PFM/FCCM control; OVP/OCP/SCP/OTP. Enable Output Control.
SY21523EPZC	2.8	5.5	5 Chs Buck+2 Chs LDO	CSP3.23×3.23-52	SSD	5 Chs Buck(2Ch can work LSW), 2Ch LDO. 3.4MHz I2C, Hardware sleep control; Reset output; Auto PFM/FCCM control; OVP/OCP/SCP/OTP. Enable Output Control.
SY21572PZS	2.8	5.5	5 Chs Buck+2 Chs LDO	CSP3.2×3.2-52	SSD	3.4MHz I2C, Hardware sleep control; Reset output; Auto PFM/FCCM control; OVP/OCP/SCP/OTP. Enable Output Control.
SY21576AVTS	2.8	3.7	4 Chs Buck+2 Chs LDO	CSP2.6×3.6-36	SSD	4 Chs Buck and 2 Chs LDO; 3.4MHz I2C; OVP/SCP/OTP; Auto PWM/PFM or Forced PWM Controlled

## HV PMIC

Part Number	V <sub>IN</sub> (Min) (V)	V <sub>IN</sub> (Max) (V)	Number of Channels	Package	Application	Integrated Function
<b>NEW</b> SY21524DRGQ	2.6	16	1	QFN4×4-25	SSD	Input-side reverse blocking switch, Bi-directional DC/DC regulator, I2C interface.
<b>NEW</b> SY21565TTC	4.5	28	2	QFN3×3-19	Notebook /Monitor/ Desktop	Wide input voltage range, high efficiency PMIC for USB power delivery applications. The device integrates a 5A buck regulator, a external PMOS driver and a external NMOS driver to realize power path control.



IOT

**AC/DC**

Part number	App.Type	LED Channels	Input Voltage	LED Voltage	LED Current	Control Method	Switching Frequency	Package	Int.MOS
SY22103AADC/S Y22103ADBC	Handheld devices Backlight	1	2.8 to 40V	<40V	<300mA	Boost	1MHz	TSOT23-6 /DFN3x3-10	40V/2A
SY22104DBC	Handheld devices Backlight	1	2.8 to 30V	<30V	<300mA	Boost	1MHz	DFN3x3-10	30V/4A
SY22102ABC/ SY22102ADC/ SY22102AABC	Handheld devices Backlight	1	2.8 to 30V	<30V	<300mA	Boost	1MHz	TSOT23-6 /SOT23-6	30V/2A
SY22121POC	Phone/PAD Backlight	2	2.7 to 28V	<40V	<30mA	Boost+LDO	1MHz	CSP 1.31x1.31-9	40V/1A
SY22142BABC	TV Power Backlight	1	9-28vdc	<200V	<1.5A	Boost	120KHz	SOT23-6	NA
SY22122LFEC/ SY22122LFFC	Monitor Backlight	4	4.5-30V	<30V	<240mA	Boost + current sink	100KHz-1MHz	SOP16E/ SOP16	60V/3Ω
SY22159RBQ	Notebook or tablet Backlight	6	3V-24V	<40V	6-25mA	Boost+ current sink	100KHz-1.5MHz	QFN3.5x3.5	40V/200mΩ
SY22166QCQ	Notebook or tablet Backlight	6	2.7V-20V	<46V	<50mA	Boost+ current sink	320KHz-1.3MHz	QFN4.0x4.0	48V/200mΩ
SY22166VGS	Notebook or tablet Backlight	6	2.7V-20V	<46V	<50mA	Boost+ current sink	320KHz-1.3MHz	WLCSP2.43x1.77	48V/200mΩ

## LED Lighting(AC-DC)

Part Number	App.Type	PF	Description	Input V <sub>AC</sub>	Output Power	Output Current	Package
SY22678ABC	AC Buck non-dimming	>0.9	PSR, QR, CC, Buck controller	120/230V <sub>AC</sub>	<100W	NA	SOT23-6
SY22679BABC	AC Flyback non-dimming	>0.9	PSR, QR, CC, Buck-Boost/Flyback controller	120/230V <sub>AC</sub>	<100W	NA	SOT23-6
SY22603AJAC	Ripple-Remover	NA	Ripple-Remover, Low BOM cost, Thermal Protection	NA	NA	0,25~1.2A	TO252-3
SY28611SFAC	Dim-Interface	NA	3-in-1 Dimming Interface	NA	NA	NA	SO8
SY22743UFAC	PFC_Boost_CV	>0.9	QR, CV, Boost, Int. MOS 500V/4.9Ω single winding	230V <sub>AC</sub>	<50W		SO8
SY22650BFAC	PFC_Flyback_CV	>0.9	PSR, QR, CV, Controller	120/230V <sub>AC</sub>	<80W		SO8
SY22651ZFAC	DC Buck PWM Dimming	>0.5	CC, Buck controller, PWM/Analog dim	40~400V <sub>DC</sub>	<80W		SO8
SY22661FAC	AC Flyback PWM Dimming	>0.9	PFC,CC, Flyback controller, 0-10V dim	120/227V <sub>ac</sub>	<80W		SO8
SY22652NFAC	AC Flyback PWM Dimming	>0.9	PFC, CC, Flyback controller, PWM/Analog dim	120/230V <sub>AC</sub>	<80W		SO8
SY22652ZFAC	DC Flyback PWM Dimming	>0.5	CC, Flyback controller, PWM/Analog dim	400V <sub>DC</sub>	<150W		SO8
SY22745FFP	Boost+LLC Combo IC	PF>0.95 THD<5%	SSR,CC/CV Controller	120/277V <sub>ac</sub>	<400W		SOP16
SY22643NFCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB148°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22643AFCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB110°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22643BFCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB122°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22643CFCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB128°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22643PFCP	AC Linear Triac Dimming	>0.9	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB148°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22643QFCP	AC Linear Triac Dimming	>0.9	Linear Triac Dimming, Int. MOS 350V/20Ω, TFB122°C	120V <sub>AC</sub>	<12W	<70mA	SO8E
SY22642A1FCC	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 500V	230V <sub>AC</sub>	<12W	<45mA	SO8E



Part Number	App. Type	PF	Description	Input V <sub>AC</sub>	Output Power	Output Current	Package
SY22642B1FCC	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 500V	230V <sub>AC</sub>	<12W	<45mA	SO8E
SY22642C1FCC	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. MOS 500V	230V <sub>AC</sub>	<12W	5~12mA	SO8E
SY22638A2FCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. Main MOS 500V and Bleeder MOS 700V, Low current ripple	230V <sub>AC</sub>	<12W	16~30mA	SO8E
SY22638B4FCP	AC Linear Triac Dimming	>0.7	Linear Triac Dimming, Int. Main MOS 500V and Bleeder MOS 700V, Low current ripple	230V <sub>AC</sub>	<12W	12~20mA	SO8E

## LED Lighting(DC-DC)

Part Number	App.Type	Input Range(V)	Description	Max. LED Current	F(Hz)	Topology	Package
SY22671FFP	DCDC Buck	33V-92V	Buck Controller, Precision Analog Dimming	5A	Adjustable frequency	Buck	SOP16
SY22173ABC	IR LED	2.8V-30	Buck, Int. 30V/200mΩ MOS,PWM dimming	1.0A	1M	Buck	SOT23-6
SY22175FCC	IR LED	2.8V-30	Buck, Int. 30V/100mΩ MOS,PWM dimming,	3.0A	1M	Buck	SO8E
SY22175BFCC	IR LED	2.8V-30	Buck. int.30V/100mΩ MOS,PWM dimming, Small dimming scale accuracy	3.0A	1M	Buck	SO8E
SY22151ABC	IR LED	2.8V-30	Buck. int.30V/100mΩ MOS, Analog dimming,	1.5A	1M	Buck	SOT23-6
SY22177ABC	IR LED	2.8V-25	Buck. Int. 25V/200mΩ MOS, Analog dimming,	0.8A	1M	Buck	SOT23-6
SY22728A1ADC	IR LED	4.0V-23	Sync Buck, Int. 23V/125mΩ&23V/75mΩ MOS,PWM dimming, Small dimming scale accuracy	2.0A	1M	Buck	TSOT23-6
SY22728B1ADC	IR LED	4.0V-23	SYN Buck, Int. 23V/125mΩ&23V/75mΩ MOS,PWM dimming, Small dimming scale accuracy	1.5A	1M	Buck	TSOT23-6
SY22728H1ADC	IR LED	4.0V-23	SYN Buck, Int. 23V/125mΩ&23V/75mΩ MOS, Analog dimming, Small dimming scale accuracy down to 1% dimming scale	1.5A	1M	Buck	TSOT23-6
SY22146AABC	IR LED	2.8V-30	Boost, Int.30V/220mΩ MOS,PWM dimming	2.0A	1M	Boost	SOT23-6
SY22101AADC	IR LED	2.7V-5.5	Boost, Int.40V/400mΩ MOS,PWM dimming, Small dimming scale accuracy	1.0A	1M	Boost	SOT23-6

Part Number	App.Type	PF	Description	Input V <sub>AC</sub>	Output Power	Output Current	Package
SY22605ABC	MR16 non-dimming	>0.9	Boost, Int.40V/220mΩ MOS	12V <sub>AC</sub>	<5W	<300mA	SOT23-6
SY22606FCC	MR16 non-dimming	>0.9	Boost, Int.40V/220mΩ MOS	12V <sub>AC</sub>	<8W	>18Vout	SO8E
SY22608FPC	MR16 non-dimming	>0.9	Boost, Int.40V/120mΩ MOS	12V <sub>AC</sub>	<5W	>18Vout	CPC8
SY22627FCC	MR16 dimmable	>0.9	Boost+LDO, Int.40V/120mΩ MOS, Best compatibility	12V <sub>AC</sub>	<8W	>18Vout	SO8E
SY22628FCC	MR16 dimmable		Boost, Int.60V/650mΩ MOS		<20W	>18Vout	SO8E
SY22629ABC	MR16 dimmable		Boost, Int.60V/650mΩ MOS		<15W	8~24Vout	SOT23-6

## AC-DC PSR Flyback Controller for Charger and Adapter

Part Number	Function	Operation Mode	HV Startup	OCP Protection	OVP Protection	UVP Protection	No Load Loss	Package
SY22817AABC	PSR Flyback Controller with UVP	QR	NO	YES	YES	YES	<75mW	SOT23-6

## AC-DC PSR Flyback Converter with 600V~700V MOS Integrated for Charger and Adapter

Part Number	Function	Max Power	Integrated FETs	Typical R <sub>dson</sub>	Operation Mode	HV Startup	OCP Protection	OVP Protection	UVP Protection	No Load Loss	Package
SY23413MFAP	PSR Flyback	12W	650V	4.4Ω	QR	NO	YES	YES	NO	<75mW	SO8
SY23406ZFAC	PSR Flyback	18W	620V	2.2Ω	QR	NO	YES	YES	NO	<75mW	SO8
SY23418VFAC	PSR Flyback	24W	650V	1.2Ω	QR	NO	YES	YES	NO	<75mW	SO8
SY23407FQC	PSR Flyback with HV Start Up	12W	700V	4Ω	QR	YES	YES	YES	YES	<20mW	SO7

## AC-DC PSR Flyback Converter with 800V~1000V BJT Integrated for Charger and Adapter

Part Number	Function	Max Power	Integrated FETs	Operation Mode	HV Startup	OCP Protection	OVP Protection	UVP Protection	No Load Loss	Package
SY23401CFAC	PSR Flyback with UVP	3.5W	980V	QR	NO	YES	YES	YES	<75mW	SO8
SY23411WAZC	PSR Flyback without UVP	6W	800V	QR	NO	YES	YES	NO	<75mW	SOT335

## AC-DC SSR Flyback Controller for Charger and Adapter

Part Number	Function	Operation Mode	Max Frequency	HV Startup	OCP Protection	OVP Protection	UVP Protection	BO/BI	Input OVP Protection	No Load Loss	Package
<b>NEW</b> SY22815FAC	QR SSR Flyback Controller with HV Start Up	QR	125kHz	YES	YES	YES	NO	NO	NO	<50mW	SO8
SY22818CFAP	CCM+QR SSR Flyback Controller with Input OVP	CCM/QR	90kHz	YES	NO	YES	YES	YES	YES	<50mW	SO8
<b>NEW</b> SY22812BFVP	QR SSR Flyback Controller with GaN Driver	QR	300kHz	YES	NO	YES	YES	YES	NO	<50mW	SSOP9

## AC-DC SSR Flyback Converter with 700V E-mode GaN Integrated for Charger and Adapter

Part Number	Function	Integrated FETs	Typical Rdson	Operation Mode	Max Frequency	HV Startup	Lock Ring	OVP Protection	UVP Protection	BO/BI	No Load Loss	Package
SY23496XDQ	QR SSR Flyback for Max 100W	700V	165mΩ	QR	500kHz	YES	YES	YES	YES	YES	<50mW	QFN 5×7-18
<b>NEW</b> SY23498XDQ	QR SSR Flyback for Max 180W	700V	104mΩ	QR	500kHz	YES	YES	YES	YES	YES	<50mW	QFN 5×7-18

## AC-DC SR Controller for Charger and Adapter

Part Number	Function	Operation Mode	Max DSEN	SR Position	Dual Supply Channel	ZVS Function	Package
SY23425AABT	CCM+QR SR Controller	CCM/QR/DCM	200V	High Side / Low Side	YES	NO	SOT23-6
SY23434FPP	ZVS SR Controller	QR/DCM	130V	High Side / Low Side	YES	YES	CPC8

## AC-DC SR Switcher with 40V~100V MOS Integrated for Charger and Adapter

Part Number	Function	Integrated FETs	Typical Rdson	Operation Mode	SR Position	Dual Supply Channel	Package
SY23429AAZC	SR Switcher for QR Mode	60V	19mΩ	QR/DCM	High Side / Low Side	NO	SOT335
SY23451FAC	SR Switcher for QR Mode	60V	10mΩ	QR/DCM	High Side / Low Side	NO	SO8
SY23421FAP	SR Switcher for CCM+QR Mode	65V	8.7mΩ	CCM/QR/DCM	High Side / Low Side	YES	SO8

## AC-DC PSR Flyback Converter with 900V MOS Integrated for Power Meter

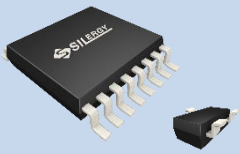
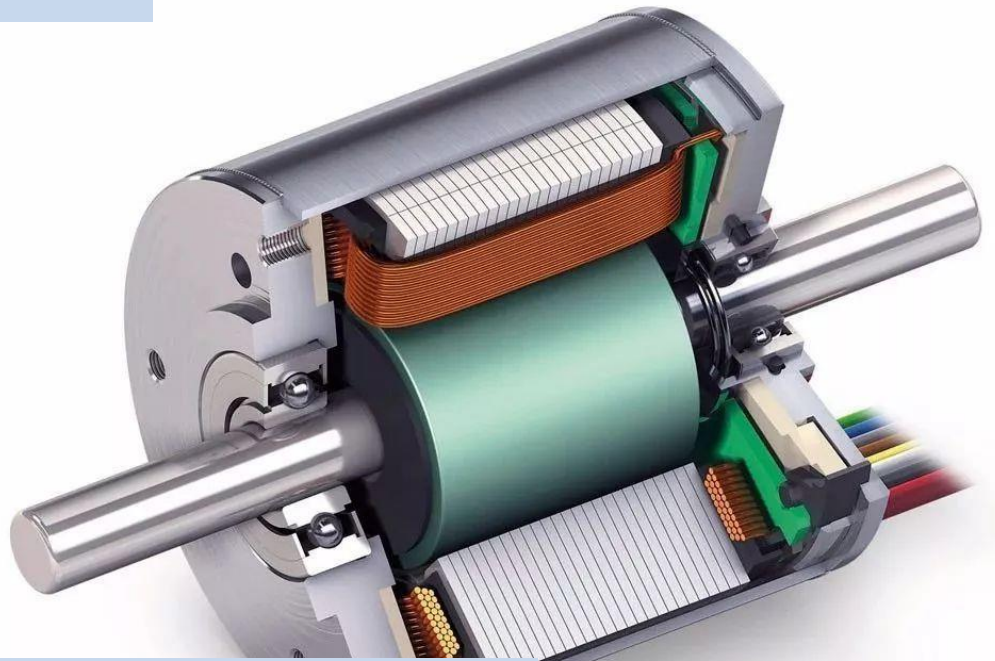
Part Number	Function	Max Power	Integrated FETs	Typical Rdson	Operation Mode	Max Frequency	HV Startup	OCP Protection	OVP Protection	No Load Loss	Package
SY23433BFHC	PSR Flyback	7W	900V	13.4Ω	QR	125kHz	YES	YES	YES	<75mW	SSOP10

## AC-DC Buck Converter with 500V~700V MOS Integrated for Home Appliances

Part Number	Function	Max Power	Integrated FETs	Typical Rdson	Output Voltage	Operation Mode	Max Frequency	HV Startup	OCP Protection	OVP Protection	Package
SY22841AAC	Buck Converter	2.4W	500V	12Ω	Adjustable	QR	45kHz	NO	YES	YES	SOT23-5
SY22845FAC	Buck Converter	4.2W	700V	7.5Ω	Adjustable	QR	45kHz	NO	YES	YES	SO8
<b>NEW</b> SY22847BFAC	Buck Converter for 12V Output	4.3W	650V	9Ω	12V	CCM/DCM	40kHz	YES	NO	YES	SO8
<b>NEW</b> SY22848AGC	Buck Converter for 18V Output	6.5W	650V	9.2Ω	18V	CCM/DCM	40kHz	YES	NO	YES	DIP8
<b>NEW</b> SY22848BAGC	Buck Converter for 12V Output	4.3W	650V	11.5Ω	12V	CCM/DCM	40kHz	YES	NO	YES	DIP8

## AC-DC PFC+LLC Controller for TV/PC/Gaming Adapter

Part Number	Function	Operation Mode	Control Mode	Protection	Support DC Input	Package
SY23505AHXP	PFC+LLC Combo Controller	PFC: CrM/DCM/Burst LLC: CCM/DCM/Burst	PFC: Average current mode LLC: Current mode	AC Brown in/out, OCP, OVP, OTP, PFC OPP	NO	SOP14



# Motor Driver

Part Number	Recommended Operating Voltage		Drive Current Max (A)	MOSFET Ron HS+LS (mΩ)	Low power Sleep Mode	Package	Typical Applications
	Min (V)	Max (V)					
SY21603HFC	2.5	12	1.5	<480	✓	TSSOP-16E	POS Printers, Consumer Products, Robotics, Game Machines, Toys
SY21603QIC	2.5	12	1.5	<480	✓	QFN4×4-16	POS Printers, Consumer Products, Robotics, Game Machines, Toys
SY21611FHC	2.5	16	0.8	<700	✓	SSOP10	Refrigerators, Stepper Motors
SY21634FCC	5	32	3.6	<500	✓	SO8E	Consumer Products, Robotics, DC Brush Motor
SY21604HHC	5	32	3	<250	✓	TSSOP24E	Appliance Fan, 3-phase BLDC Fan, HVAC
SY21621HHP	2.7	18	1.5	<670	✓	TSSOP16	Refrigerators, DC Brush Motors, Solenoid Valve Load
SY21626RPQ	5	26	6.5	<140	✓	QFN5×5-40	3-Phase BLDC Motor Driver
<b>NEW</b>							
SY21643HHP	5	32	3	<240	✓	TSSOP24E	Fan, Pump, HVAC





# Signal Chain

## Class-D Amplifier

Part Number	Input	Ch(#)	Vs_min(V)	Vs_max(V)	Load_min(Ω)	Po(W/Ch)	THD+N(%)@ 1W	SNR(dB)	Features	Package
SY24104QCC	Analog	2	5.5	16	6	7	0.05	100.5	Filter-less	QFN4×4-24
SY24104AQCC	Analog	2	5.5	12	6	4	0.05	100.5	Filter-less	QFN4×4-24
SY24105QEC	Analog	2	6	26	3.2	30	0.03	105.5	AM Avoidance	QFN5×5-32
SY24105BQEC	Analog	1	5.6	26	2.5	60	0.028	106	AM Avoidance	QFN5×5-32
SY24108QEC	Analog	2	5.6	16	3.2	20	0.026	104.1	AM Avoidance	QFN5×5-32
SY24145AQEC	Digital	2	4.5	28	4	20	0.025	101	3.3V/1.8V I/F, 3 Band+ Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT	QFN5×5-32
SY24145BQHC	Digital	2	4.5	28	4	20	0.041	101	3 Band + Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT	QFN6×6-40
SY24145SGAC	Digital	2	4.5	28	4	30	0.026	101.3	3 Band + Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT	TQFP7×7-48
SY24145SQHC	Digital	2	4.5	28	4	30	0.026	101.3	3 Band+ Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT	QFN6×6-40
SY24146SGAC	Digital	2	4.5	28	4	30	0.026	101.3	3 Band + Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT, Capless Headphone Driver	TQFP7×7-48
SY24175DGAC	Digital	2	4.5	28	4	20	0.055	100.7	3 Band + Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT	TQFP7×7-48
SY24150GAF	Digital	2	4.5	28	4	20	0.055	100.7	3 Band + Post band DRC, 12 PEQs + 6 SPEQs, SDOUT	TQFP7×7-48
SY24120QHQ	Digital	2	4.5	28	4	20	0.041	101	3 Band + Post Band DRC, 12 PEQs + 6 SPEQs, SDOUT, 4 I2C Address	QFN6×6-40

## Headphone or Line Driver

Part Number	Input	Ch(#)	Vs_min(V)	Vs_max(V)	Po(W) @ 1%THD+N	PSRR(dB)	THD+N(%)	SNR (dB)	Features	Package
SY24112QDC	Analog	2	2.2	5.5	21m	83	0.015	106	capacitor-less	QFN3×3-16

## Digital Light Sensor

Part Number	Description	Bits	V <sub>CC</sub>		Comm. Method	I <sub>DD</sub> @ Power Down	I <sub>out</sub> ( $\mu$ A) @EV=100lux, V <sub>CC</sub> =3V	Finest Resolution	Gain & Tint Setting	Package
			Min(V)	Max(V)						
SY22306-S1	ALS with side-look package	12	2.3	3.6	I <sup>2</sup> C	<1.0 $\mu$ A	110 $\mu$ A	0.029 lux/count	5 gain	SMD3013-4L side-look
SY22309AS22-J01	Ambient Light Sensor	16	2.6	3.6	I <sup>2</sup> C	<1.0 $\mu$ A	90 $\mu$ A	0.0079 lux/count	/	SMD2015-8L
SY22316PS32-G00	PXS	16	2.8	3.6	I <sup>2</sup> C	<2.0 $\mu$ A	/	/	/	SMD2515-6L
SY22312CS42-J10	11-Channel Multi-Spectrum Sensor	16	1.7	2.0	I <sup>2</sup> C	<20 $\mu$ A	450 $\mu$ A@V <sub>CC</sub> =1.8V	/	12 gain+ 9 integration time	SMD3120-8L

Part Number	Application	Channels	Direction	V <sub>RWM</sub> (V)	C <sub>J</sub> (pF)	I <sub>PP</sub> (A)	P <sub>PK</sub> (W)	Package
SY205214ABC	USB/VGA/HDMI	4	Uni	5	0.6	3	36	SOT23-6
SY205215AOC	USB2.0	2	Uni	5	0.6	4	50	SOT-23
SY205216DWC	USB Vbus, Smart Phone	1	Bi	24	12	4	180	DFN1.0×0.6-2
SY205218DWC	12V Low Speed Interface	1	Bi	12	4	4	90	DFN1.0×0.6-2
SY205218DXC	12V Low Speed Interface	1	Bi	12	4	4	90	DFN0.6×0.3-2
SY205219DXC	5V High Speed Interface, USB-C	1	Bi	5	0.15	4	55	DFN0.6×0.3-2
SY205220SFC	USB3.x	8	Uni	3.3	0.42	6	30	DFN3.8×1.0-9
SY205253SMD	USB2.0	2	Uni	3.3	0.42	7	40	DFN1.0×0.6-3
SY205221DWC	USB3.0	1	Uni	5	0.5	4	50	DFN1.0×0.6-2
SY205222DVD	HDMI/USB	4	Bi	5	0.5	4.5	45	DFN2.5×1.0-10
SY205223DWC	HDMI/USB	1	Bi	5	0.5	4.5	45	DFN1.0×0.6-2
SY205260DVC	HDMI/USB	4	Uni	5	0.5	6	42	DFN2.5×1.0-10
SY205226DWC	HDMI/USB	1	Bi	3.3	0.4	7	56	DFN1.0×0.6-2
SY205227DVD	HDMI/USB	4	Bi	3.3	0.4	7	56	DFN2.5×1.0-10
SY205228DWC	USB Vbus, Smart Phone	1	Bi	12	25	7.5	210	DFN1.0×0.6-2
SY205229AWC	USB2.0	2	Uni	5	1.2	7.5	100	SOT-143
SY205209ABC	USB/VGA	4	Uni	5	1.2	8	100	SOT23-6
SY205208DXC	USB3.x, USB Type-C	1	Bi	5	0.2	9	55	DFN0.6×0.3-2
SY205207DXC	USB-C/RF Antenna	2	Bi	24.5	0.2	9	50	DFN0.6×0.3-2
SY205206DWC	Normal Cap ESD for General I/O	1	Bi	5	2	10	100	DFN1.0×0.6-2
SY205206DXC	Normal Cap ESD for General I/O	1	Bi	5	2	10	100	DFN0.6×0.3-2
SY205231DWD	Ultra-low Cap ESD for High-speed Interface	1	Bi	5	0.28	10	65	DFN1.0×0.6-2

Part Number	Application	Channels	Direction	V <sub>RWM</sub> (V)	C <sub>J</sub> (pF)	I <sub>PP</sub> (A)	P <sub>PK</sub> (W)	Package
SY205232DWC	3.3V High Speed Interface	1	Bi	3.3	1	12	120	DFN1.0×0.6-2
SY205232DXC	3.3V High Speed Interface	1	Bi	3.3	1	12	120	DFN0.6×0.3-2
SY205205ANC	Audio/Key	1	Bi	3.3	27	15	140	SOD523
SY205205DWC	Audio/Key	1	Bi	3.3	27	15	140	DFN1.0×0.6-2
SY205205DXC	3.3V Low Speed Interface	1	Bi	3.3	27	15	140	DFN0.6×0.3-2
SY205236ABC	VGA/RJ45	4	Uni	5	3.5	20	350	SOT23-6
SY205213DXD	USB4,TB4,USB TYPE-C	1	Bi	1.5	0.17	6	24	DFN0.6x0.3-2
SY205237DVD	HDMI2.1	4	Uni	3.3	0.25	7	70	DFN2.5x1.0-10
SY205238DWD	Audio/Key	1	Bi	5	23	10	90	DFN1.0x0.6-2
SY205238DXD	Audio/Key	1	Bi	5	23	10	90	DFN0.6x0.3-2
SY205239DWD	Audio/Key	1	Bi	5	45	20	180	DFN1.0x0.6-2
SY205256DWD	Audio/Key	1	Bi	5	14	9	75	DFN1.0x0.6-2
SY205256DXD	Audio/Key	1	Bi	5	14	9	75	DFN0.6x0.3-2
SY205257DWD	Audio/Key	1	Bi	3.3	17	10	65	DFN1.0x0.6-2
SY205257DXD	Audio/Key	1	Bi	3.3	17	10	65	DFN0.6x0.3-2
SY205258DWD	USB3.x,USB2.0	1	Bi	5	0.45	15	100	DFN1.0x0.6-2

Part Number	Application	Channels	Direction	V <sub>RWM</sub> (V)	fc(GHz)	IL	Atten	Package
SY205201SSC	MIPI/HDMI	4	Uni	5	4.0	-0.33dB@10MHz	-35dB@1.5GHz	DFN2.5×2.0-10
SY205203TXD	LCD/Camera	4	Uni	5	0.25	-6dB@10MHz	-20dB@0.8GHz	DFN1.6×1.0-8
SY205255TLD	LCD/Camera	6	Uni	5	0.25	-6dB@10MHz	-20dB@0.8GHz	DFN2.5×1.35-12

## Surge Protection

Part Number	Application	Channels	Direction	V <sub>RWM</sub> (V)	C <sub>J</sub> (pF)	I <sub>PP</sub> (A)	P <sub>PK</sub> (W)	Package
SY205241AMC	RJ45	1	Bi	24	0.6	6	550	SOD323
SY205242AMC	RJ45	1	Bi	12	0.6	12	550	SOD323
SY205243AMC	RJ45	1	Bi	5	0.6	20	550	SOD323
SY205244AMC	DC IN	1	Bi	5	200	24	350	SOD323
SY205211AMC	RJ45	1	Bi	3.3	0.6	25	550	SOD323
SY205212SLC	Vbus	1	Uni	20	210	25	850	DFN1.6×1.0-2
SY205210DHC	RJ45	4	Uni	2.5	3.5	40	1000	DFN3.0×2.0-10
SY205245SLC	Vbus	1	Uni	12.5	400	52	1100	DFN1.6×1.0-2
SY205246SLC	Vbattery,Smart Phone	1	Uni	5	1100	100	1300	DFN1.6×1.0-2
SY205246AMC	Surge protection TVS for Power line	1	Uni	5.5	1100	100	1300	SOD-323
SY205247SLC	Vbus & Vbat surge protection	1	Uni	5	2100	200	2100	DFN1.6×1.0-2
SY205204SLC	Vbus & Vbat surge protection	1	Uni	4.5	1100	240	3100	DFN1.6×1.0-2
SY205248DWD	Vbus/Vbat	1	Uni	24	85	9	320	DFN1.0×0.6-2
SY205249SLD	VBUS	1	Uni	28	140	22	1000	DFN1.6x1.0-2
SY205250SLD	VBUS	1	Uni	36	95	17	900	DFN1.6x1.0-2
SY205251SLD	VBUS	1	Uni	48	60	12	750	DFN1.6x1.0-2
SY205252THD	RS485	2	Uni	12	6	100	3000	DFN2.0x2.0-5
<b>NEW</b>								
SY205269SLD	Vbus/Vbat	1	Uni	5	600	100	800	DFN1.6×1.0-2



Part Number	I/O Pins	LUTs	DFF/ Latches	CNT/ Delays	ASM	Interface	RC Oscillators	Analog Glitch Filters	Analog ACMPs	VDD	Special Features	Package
SY25318CVYQ	18	17	4	6	Y	I2C/UART	25KHz/2MHz/ 25MHz	2	4	3.3V/5V	2x Vref out	QFN2×3-20



# Contact Us

Silergy Corp. was founded by a group of technology innovators and business leaders with an average 30 years' experience. We design innovative mixed-signal and analog ICs that utilize our industry-leading process technologies. Widely used in automotive, industrial, consumer, computing and communication devices, our products are designed to improve efficiency and to conserve or measure energy use.

Silergy Corp is a Cayman Island company with its operations headquarters in Hangzhou, China. The company stock is traded on Taiwan Stock Exchange (TWSE: 6415).

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