

## MAX15157D Evaluation Kit

Evaluates: MAX15157D

### General Description

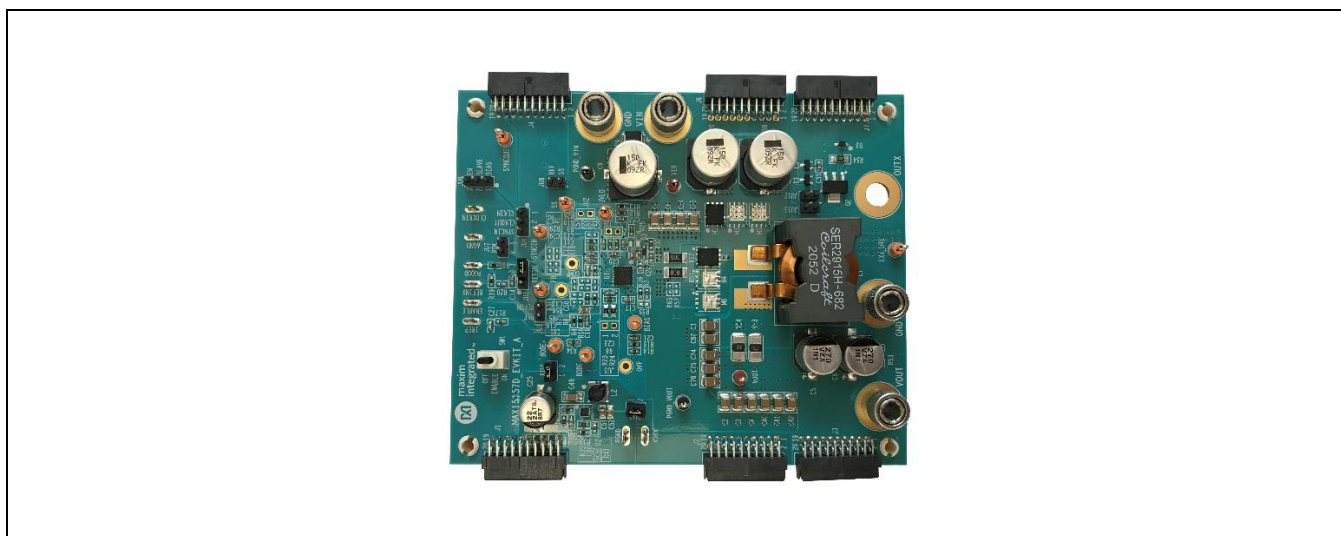
The MAX15157D evaluation kit (EV kit) is a fully assembled and tested circuit board that contains all of the components necessary to evaluate the performance of the MAX15157D high-efficiency step-down regulator. The EV kit is powered from a 40V to 60V DC supply. It is capable of delivering 12V/20A output at a 150kHz switching frequency. Refer to the MAX15157D data sheet to set the switching frequency and input/output voltage ranges for the EV kit.

### Features and Benefits

- 40V to 60V Input Voltage Range (Configurable from 8V to 60V)
- 12V Output Voltage (Configurable from 3V to  $0.95 \times V_{IN}$ )
- Adjustable Slope Compensation Ramp
- Multiphase Operation up to 8 Phases
- Adjustable 60kHz to 1MHz Switching Frequency
- External Switching Frequency Clock Synchronization
- External REFIN Input for Output Adjustment
- Hiccup Fault Protection for Overcurrent and Thermal Shutdown
- PGOOD Output (Power-Good Output)
- Adjustable Input UVLO and Output OVP Voltage
- Adjustable Soft-Start
- Monotonic Startup into Prebiased Output

[Ordering Information](#) appears at end of data sheet.

### MAX15157D EV Kit Photo



### Quick Start

#### Required Equipment

- MAX15157D EV Kit
- 40V to 60V, 10A DC Power Supply V1 for VIN
- E-Load Capable of Sinking 25A
- Digital Voltmeters
- Oscilloscope

## Setup and Operation

The EV kit is fully assembled and tested. Use the following steps to verify board operation.

**Caution: Do not turn on the power supply until all connections are completed.**

- 1) Install a shunt across pins 2-3 of jumper JU1. (The internal 2.0V reference voltage is used for regulation.)
- 2) Install shunts at jumpers JU10 and JU11 (DRV = 10V on board from VIN).
- 3) Leave the following jumpers open (no shunts): JU3, JU4, JU7, JU8, JU9, JU12, and JU13.
- 4) Switch SW1 to the OFF position to disable the MAX15157D.
- 5) Turn on power supply V1 and set its voltage to 48V and current limit to 10A, then disable the power supply.
- 6) Connect the positive terminal of power supply V1 to the VIN connector and the negative terminal of the power supply to the GND connector, which is next to the VIN connector.
- 7) Connect the E-load to the VOUT and GND connectors and disable the load.
- 8) Connect voltmeters to VOUT and PGND\_VOUT, VIN and PGND\_VIN for voltage measurement.
- 9) Connect the probes of an oscilloscope to VOUT, ENABLE, and PGOOD for waveform measurement.
- 10) Enable the power supply and switch SW1 to the ON position.
- 11) Verify that the voltage between the VOUT and PGND\_VOUT test points is 12V.

The EV kit is now ready for additional evaluation.

## Detailed Description of Hardware

The MAX15157D EV kit is a fully assembled and tested board for evaluating the performance of the MAX15157D 240W synchronous step-down regulator. The EV kit operates from 40V and 60V inputs and has a 12V output by default. Output voltage can be changed by the changing resistor-divider (R7 and R8) at the FB pin or by using an external REFIN (shunt at pins 1-2 of jumper JU1 and the 1V to 2.2V input between REFINX and AGND). Make sure that the correct compensation is selected for stable operation.

### Regulator Enable (ENABLE)

The MAX15157D features a shutdown mode to minimize the IC quiescent current. To shut down the IC, pull ENABLE below 0.54V or switch SW1 to the OFF position.

**Table 1. Regulator Enable (SW1)**

SW1 POSITION	EN PIN CONNECTION	MAX15157D FUNCTION
ON	Connect resistor-divider from DRV to GND	Enabled
OFF	GND	Disabled

### Reference Voltage (REFIN)

The MAX15157D uses an internal 2V reference or an external reference input. The IC regulates feedback (FB) to the internal 2V or external voltage at REFINX, as shown in Table 2.

### Configuring the Input Voltage Range (VIN)

The minimum input voltage ( $V_{IN\_min}$ ) can be set as low as 8V by adjusting the external resistor-divider at the UVLO pin of the MAX15157D (U1) using the equation:

$$V_{IN\_min} = V_{UVLO} \times (R_{12} + R_{13})/R_{12}$$

where  $V_{UVLO}$  is the UVLO threshold of MAX15157D (1.0V (typ, rising), with 100mV hysteresis).

In addition, to guarantee the DRV supply voltage when operating in a low input voltage range, it is suggested to select the resistor-divider at EN/UVLO pin of the MAX15062C (U2) so that:

$$V_{IN\_min} > V_{EN/UVLO} \times (R_{33} + R_{35})/R_{35}$$

where  $V_{EN/UVLO}$  is the EN/UVLO threshold of the MAX15062C (1.215V (typ, rising), with 125mV hysteresis). If necessary, apply an external 10V DRV voltage between the VDRV and PGND connectors to supply the MAX15157D; in this case, jumpers JU10 and JU11 must be removed.

### Configuring the Output Voltage (VOUT)

VOUT can be set between 3V to  $0.95 \times V_{IN}$  and externally programmed using the following equation:

$$V_{OUT} = V_{REF} \times (R_7 + R_8)/R_8$$

where  $V_{REF}$  is the reference voltage in Table 2 (2V for preset mode, 1V to 2.2V for tracking mode).

**Table 2. Reference Voltage (JU1)**

SHUNT POSITION	REFIN PIN CONNECTION	REFERENCE VOLTAGE ( $V_{REF}$ )	VOUT RANGE
1-2 (tracking mode)	To external voltage (at REFINX)	User-supplied reference voltage; 1V to 2.2V range	$V_{OUT} = 6V$ to 13.2V (increase R7 to get the higher VOUT)
2-3 (preset mode)	To BIAS 4V6 pin	Internal 2V reference	$V_{OUT} = 12V$ (increase R7 to get the higher VOUT)

### Switching Frequency (FREQ/CLK)

The controller supports a 60kHz to 1MHz switching frequency. The EV kit operates at a 150kHz switching frequency with a 24.9k $\Omega$  resistor (R3) at the FREQ/CLK pin.

To adjust the switching frequency ( $f_{SW}$ ), either replace R3 (connected from FREQ/CLK to GND) by using the following equation:

$$f_{SW} = (R3/100k\Omega) \times 600kHz$$

or drive the FREQ/CLK (CLOCKIN) with an external 0 to 5V clock at twice the switching frequency (it is not necessary to remove R3 when applying the external clock).

**Soft-Start (SS)**

The MAX15157D offers the SS pin to adjust the soft-start time to limit inrush current during startup. The VOUT soft-start time is controlled by C13. An internal 5μA current source charges the capacitor at the SS pin to provide a linear ramping voltage for the output voltage reference. The VOUT soft-start time ( $t_{SS}$ ) is calculated based on the following equation:

$$t_{SS} = C13 \times (V_{REF}/5\mu A)$$

where  $V_{REF}$  is the reference voltage in Table 2 (2V for preset mode, 1V to 2.2V for tracking mode).

Note that the drivers start switching once SS exceeds 50mV, and the controller enables the fault-protection circuitry when SS exceeds 1V.

**Power Good (PGOOD)**

The MAX15157D EV kit provides the PGOOD output test point. The PGOOD signal is pulled up to the 4V6 BIAS by resistor R9, and PGOOD is high when VOUT is above 90% of its programmed output voltage. When VOUT is below 90% of its programmed output voltage, PGOOD is pulled low.

**Connecting Multiple EV Kits**

The EV kit provides connectors J1, J2, J3, J4, J6, and J7 for connecting up to eight EV kits to support multiphase operation, as shown in Figure 1—one EV kit is configured as a master board and other EV kits are configured as slave boards. J4, J6, and J7 of the master EV kit are connected to J1, J2, and J3 of the slave1 EV kit; J4, J6, and J7 of the slave1 EV kit are connected to J1, J2, and J3 of the slave2 EV kit; and so on.

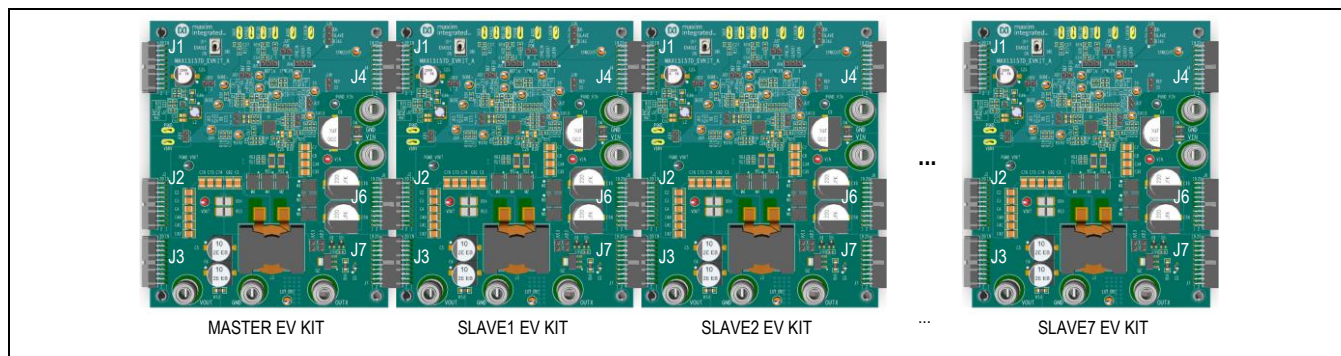


Figure 1. Connecting Multiple EV Kits

See Table 3 for peripheral circuit configurations of the MAX15157D controller on the master EV kit and slave EV kits based on the EV kit schematic.

**Table 3. Configurations on Master EV Kit and Slave EV Kits**

COMPONENTS	MASTER EV KIT	SLAVE EV KITS
Jumpers	JU1(2:3), JU4(2:3), JU8(1:2), JU10(1:2), JU11(1:2); No jumpers on JU3, JU7, JU9, JU12, JU13	JU3(1:2), JU4(1:2), JU9(2:3); No jumpers on JU1, JU7, JU8, JU10, JU11, JU12, JU13
R3, R4, R7, R8, R16, R18, C11, C12, C13	No change	Do not install (DNI)
R10	Refer to Table 1 in the MAX15157D data sheet for R10 selection (68kΩ, 100kΩ, 133kΩ, 169kΩ, or 210kΩ)	
R27, R28	RES, SMT (0612), 0Ω	RES, SMT (0612), 0Ω
R29	RES, SMT (0603), 0Ω	RES, SMT (0603), 0Ω

R31	DNI	RES, SMT (0603), 10k $\Omega$
R32	RES, SMT (0603), 10k $\Omega$	DNI
SW1	Used for ENABLE function	ON position

### Ordering Information

PART	TYPE
MAX15157DEVKIT#	EV Kit

#Denotes RoHS-compliant.

## MAX15157D EV Kit Bill of Materials

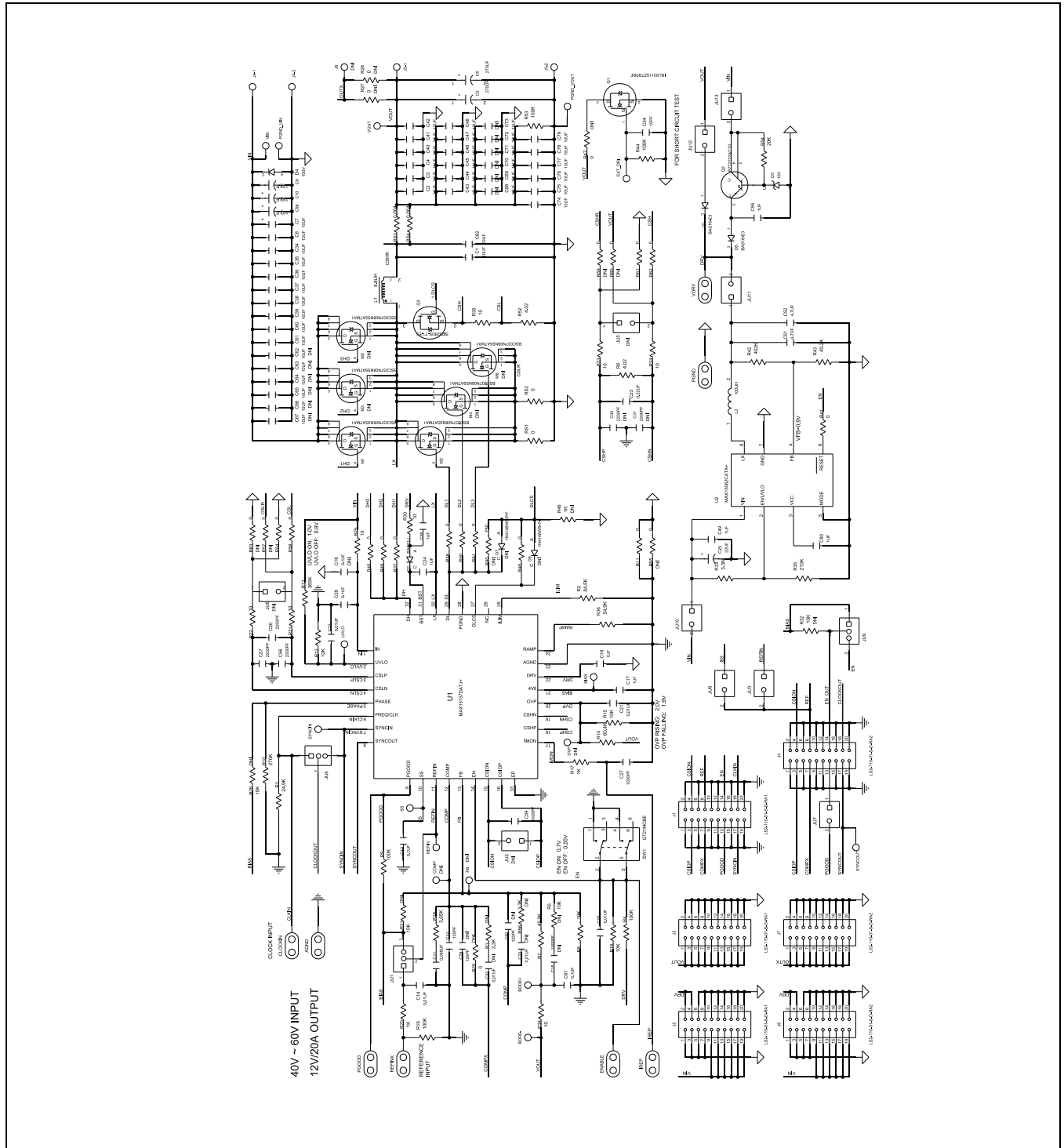
ITEM	REF DES	DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	AGND, CLOCKIN, ENABLE, IREP, PGND, PGOOD, REFINX, VDRV	—	8	9020 BUSS	WEICO WIRE	MAXIMP AD	EVK KIT PARTS; MAXIM PAD; WIRE; NATURAL; SOLID; WEICO WIRE; SOFT DRAWN BUS TYPE-S; 20AWG
2	BIAS, BODE+, BODE-, EXT_DRI, REFIN, SS, SYNCIN, SYNCOUT, UVLO	—	9	5013	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; ORANGE; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH
3	C1-C4, C7, C8, C34-C48, C60, C61, C74-C79, C82	—	30	GRM32EC72A106KE05	MURATA	10UF	CAP; SMT (1210); 10UF; 100V; X7S; CERAMIC
4	C5, C6	—	2	EEH-ZA1V271P	PANASONIC	270UF	CAP; SMT (CASE_G); 270UF; 20%; 35V; CONDUCTIVE POLYMER HYBRID ALUMINUM-ELECTROLYTIC
5	C9, C10, C58	—	3	EEV-FK1K151Q; EEE-FK1K151AQ	PANASONIC	150UF	CAP; SMT (CASE_H13); 150UF; 20%; 80V; ALUMINUM- ELECTROLYTIC
6	C11	—	1	GRM188R71H683KA93	MURATA	0.068UF	CAP; SMT (0603); 0.068UF; 10%; 50V; X7R; CERAMIC
7	C12	—	1	GRM1885C1H121JA01	MURATA	120PF	CAP; SMT (0603); 120PF; 5%; 50V; C0G; CERAMIC
8	C13	—	1	C1608X5R1H104K080AA	TDK	0.1UF	CAP; SMT (0603); 0.1UF; 10%; 50V; X5R; CERAMIC
9	C14, C19, C21, C22	—	4	C0603X7R500103JNP; C0603C103J5RAC	VENKEL LTD; KEMET	0.01UF	CAP; SMT (0603); 0.01UF; 5%; 50V; X7R; CERAMIC
10	C17, C18, C24, C26, C55, C80	—	6	UMK107AB7105KA; CC0603KRX7R9BB105	TAIYO YUDEN; YAGEO	1UF	CAP; SMT (0603); 1UF; 10%; 50V; X7R; CERAMIC
11	C20, C56, C57	—	3	C0603C22K1RAC	KEMET	2200PF	CAP; SMT (0603); 2200PF; 10%; 100V; X7R; CERAMIC
12	C23	—	1	C1608X7R1H224K080; GRM188R71H224KAC4	TDK; MURATA	0.22UF	CAP; SMT (0603); 0.22UF; 10%; 50V; X7R; CERAMIC
13	C25	—	1	EEE-FK2A220P	PANASONIC	22UF	CAP; SMT (CASE_F); 22UF; 20%; 100V; ALUMINUM- ELECTROLYTIC
14	C27, C59	—	2	GRM1885C1H102JA01; C1608C0G1H102J080AA; GCM1885C1H102JA16	MURATA; TDK; MURATA	1000PF	CAP; SMT (0603); 1000PF; 5%; 50V; C0G; CERAMIC
15	C28, C81	—	2	C0805C104K1RAC; C2012X7R2A104K125AA; GRM21BR72A104KAC4; CGA4J2X7R2A104K125AA; GCD21BR72A104KA01	KEMET; TDK; MURATA; TDK; MURATA	0.1UF	CAP; SMT (0805); 0.1UF; 10%; 100V; X7R; CERAMIC
16	C49	—	1	GRM31CR72A105KA01; C3216X7R2A105K160AA; GCH31CR72A105KE01; HMK316B7105KLH	MURATA; TDK; MURATA; TAIYO YUDEN	1UF	CAP; SMT (1206); 1UF; 10%; 100V; X7R; CERAMIC
17	C51, C52	—	2	GRM219R6YA475KA73	MURATA	4.7UF	CAP; SMT (0805); 4.7UF; 10%; 35V; X5R; CERAMIC
18	C54	—	1	C0603C100J5GAC; GRM1885C1H100JA01; 06035A100JAT2A	KEMET; MURATA; AVX	10PF	CAP; SMT (0603); 10PF; 5%; 50V; C0G; CERAMIC
19	D1, D5	—	2	BAS16-E3	VISHAY	BAS16- E3	DIODE; SWT; SMT (SOT-23); PIV=75V; IF=0.15A
20	D2	—	1	BAS21J	NXP	BAS21J	DIODE; SS; GENERAL PURPOSE DIODE; SMT (SOD-323); PIV=300V; IF=0.25A
21	D3	—	1	BZT52C10S-7-F	DIODES INCORPORATED	10V	DIODE; ZNR; SMT (SOD-323); VZ=10V; IZ=0.005A
22	D4	—	1	SMBJ100A	LITTELFUSE	100V	DIODE; TVS; SMB (DO-214AA); VRM=100V; IPP=3.7A
23	J1-J3	—	3	LS2-110-01-S-D-RA1	SAMTEC	LS2-110- 01-S-D- RA1	CONNECTOR; THROUGH HOLE; SELF MATING HERMAPHRODITIC STRIP SHROUD DOWN; RIGHT ANGLE; 20PINS

ITEM	REF DES	DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
24	J3-1, J3-2, J4-1, J4-2	—	4	111-2223-001	EMERSON NETWORK POWER	111-2223-001	MACHINE SCREW; THUMBSCREW; BANANA; 1/4-32IN; 11/32IN; NICKEL PLATED BRASS
25	J4, J6, J7	—	3	LS2-110-01-S-D-RA2	SAMTEC	LS2-110-01-S-D-RA2	CONNECTOR; THROUGH HOLE; SELF MATING HERMAPHRODITIC STRIP SHROUD UP; RIGHT ANGLE; 20PINS
26	JU1, JU4, JU9	—	3	PEC03SAAN	SULLINS	PEC03SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 3PINS
27	JU3, JU7, JU8, JU10-JU13	—	7	PEC02SAAN	SULLINS	PEC02SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 2PINS
28	L1	—	1	SER2915H-682KL	COILCRAFT	6.8UH	INDUCTOR; SMT; FERRITE CORE; 6.8UH; TOL=+/-10%; 30A
29	L2	—	1	74408943101	WURTH ELECTRONICS INC.	100UH	INDUCTOR; SMT; MAGNETICALLY SHIELDED FERRITE BOBBIN CORE; 100UH; TOL=+/-20%; 0.52A; -40 DEGC TO +125 DEGC
30	M1, M2	—	2	BSC037N08NS5ATMA1	INFINEON	BSC037N08NS5ATMA1	TRAN; NCH; PG-TDSON8; PD-(114W); I-(100A); V-(80V)
31	MH1-MH4	—	4	9032	KEYSTONE	9032	MACHINE FABRICATED; ROUND-THRU HOLE SPACER; NO THREAD; M3.5; 5/8IN; NYLON
32	PGND_VIN, PGND_VOUT	—	2	5011	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; BLACK; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH
33	Q1	—	1	IRLR3110ZTRPBF	INTERNATIONAL RECTIFIER	IRLR3110ZTRPBF	TRAN; HEXFET POWER MOSFET; NCH; DPAK; PD-(140W); I-(63A); V-(100V)
34	Q2	—	1	PZT2222AT1; PZT2222AT1G	ON SEMICONDUCTOR	PZT2222AT1G	TRAN; NPN SILICON PLANAR EPITAXIAL TRANSISTOR; NPN; SOT-223; PD-(1.5W); IC-(0.6A); VCEO-(40V)
35	Q3	—	1	SI2328DS-T1-E3	VISHAY SILICONIX	SI2328DS-T1-E3	TRAN; N-CHANNEL 100V MOSFET; NCH; SOT-23; PD-(0.73W); I-(1.5A); V-(100V)
36	R2	—	1	RC0603FR-0784K5L	YAGEO PHYCOMP	84.5K	RES; SMT (0603); 84.5K; 1%; +/-100PPM/DEGC; 0.1000W
37	R3	—	1	CRCW060324K9FK; ERJ-3EKF2492	VISHAY DALE; PANASONIC	24.9K	RES; SMT (0603); 24.9K; 1%; +/-100PPM/DEGC; 0.1000W
38	R4, R9, R19, R44	—	4	CRCW0603100KFK; RC0603FR-07100KL; RC0603FR-13100KL; ERJ-3EKF1003; AC0603FR-07100KL	VISHAY DALE; YAGEO; YAGEO; PANASONIC	100K	RES; SMT (0603); 100K; 1%; +/-100PPM/DEGC; 0.1000W
39	R6, R52	—	2	CRCW06034R02FK; RC0603FR-074R02L	VISHAY DALE; YAGEO	4.02	RES; SMT (0603); 4.02; 1%; +/-100PPM/DEGC; 0.1000W
40	R7	—	1	CRCW060349K9FK; ERJ-3EKF4992	VISHAY DALE; PANASONIC	49.9K	RES; SMT (0603); 49.9K; 1%; +/-100PPM/DEGC; 0.1000W
41	R8, R12, R15, R16	—	4	CRCW060310K0FK; ERJ-3EKF1002; AC0603FR-0710KL; RMC0603FT10K0	VISHAY DALE; PANASONIC; YAGEO	10K	RES; SMT (0603); 10K; 1%; +/-100PPM/DEGC; 0.1000W
42	R10	—	1	CRCW0603270KFK; ERJ-3EKF2703	VISHAY DALE; PANASONIC	270K	RES; SMT (0603); 270K; 1%; +/-100PPM/DEGC; 0.1000W
43	R11, R37, R38, R41, R45, R48-R51, R58, R61, R62, R64	—	13	RC1608J000CS; CR0603-J/-000ELF; RC0603JR-070RL	SAMSUNG ELECTRONICS; BOURNS; YAGEO PH	0	RES; SMT (0603); 0; 5%; JUMPER; 0.1000W
44	R13	—	1	ERJ-PA3F3653	PANASONIC	365K	RES; SMT (0603); 365K; 1%; +/-100PPM/DEGC; 0.2500W
45	R14	—	1	CRCW060360K4FK	VISHAY DALE	60.4K	RES; SMT (0603); 60.4K; 1%; +/-100PPM/DEGC; 0.1000W
46	R17, R20	—	2	ERJ-3GEYJ102	PANASONIC	1K	RES; SMT (0603); 1K; 5%; +/-200PPM/DEGC; 0.1000W
47	R18	—	1	CRCW06033K65FK	VISHAY DALE	3.65K	RES; SMT (0603); 3.65K; 1%; +/-100PPM/DEGC; 0.1000W
48	R21, R22, R25, R30, R34, R39	—	6	CRCW060310R0FK; MCR03EZPFX10R0; ERJ-3EKF10R0	VISHAY DALE; ROHM	10	RES; SMT (0603); 10; 1%; +/-100PPM/DEGC; 0.1000W
49	R23, R24	—	2	CRCW080510R0FK; ERJ-6ENF10R0	VISHAY DALE; PANASONIC	10	RES; SMT (0805); 10; 1%; +/-100PPM/DEGC; 0.1250W
50	R33	—	1	CRCW06033M30FK	VISHAY DALE	3.3M	RES; SMT (0603); 3.3M; 1%; +/-100PPM/DEGC; 0.1000W

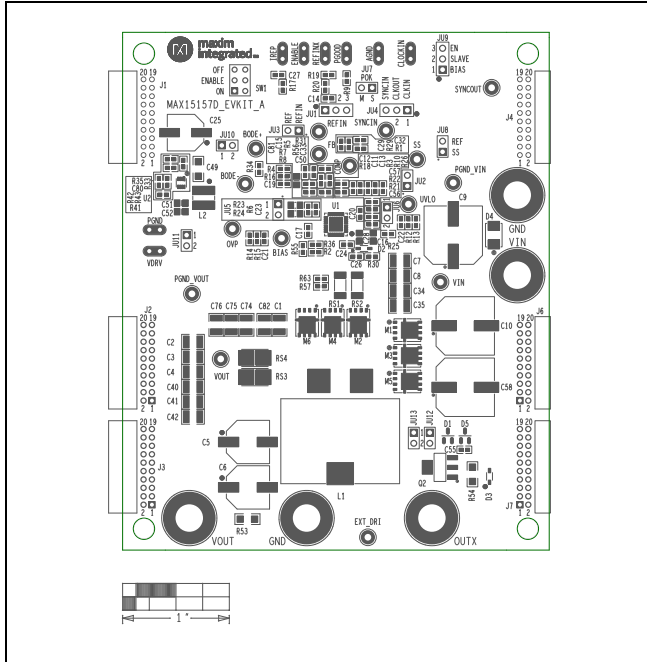
ITEM	REF DES	DNP	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
51	R35	—	1	CRCW0603210KFK	VISHAY DALE	210K	RES; SMT (0603); 210K; 1%; +/-100PPM/DEGK; 0.1000W
52	R36	—	1	CRCW060354K9FK; ERJ-3EKF5492	VISHAY DALE; PANASONIC	54.9K	RES; SMT (0603); 54.9K; 1%; +/-100PPM/DEGC; 0.1000W
53	R42	—	1	CRCW06034023FK; ERJ-3EKF4023	VISHAY; PANASONIC	402K	RES; SMT (0603); 402K; 1%; +/-100PPM/DEGC; 0.1000W
54	R43	—	1	CRCW060340K2FK; RC0603FR-0740K2L; ERJ-3EKF4022	VISHAY DALE; YAGEO; PANASONIC	40.2K	RES; SMT (0603); 40.2K; 1%; +/-100PPM/DEGC; 0.1000W
55	R53	—	1	CRCW1206100KFK; ERJ-8ENF1003	VISHAY DALE; PANASONIC	100K	RES; SMT (1206); 100K; 1%; +/-100PPM/DEGC; 0.2500W
56	R54	—	1	CRCW120620K0FK; RM12F2002CT	VISHAY DALE; CAL-CHIP ELECTRONIC INC.	20K	RES; SMT (1206); 20K; 1%; +/-100PPM/DEGC; 0.2500W
57	RS1, RS2	—	2	CRCW20100000ZS	VISHAY DALE	0	RES; SMT (2010); 0; JUMPER; 0.75W
58	RS3, RS4	—	2	WSL25124L000FEA18	VISHAY DALE	0.004	RES; SMT (2512); 0.004; 1%; +/-150PPM/DEGC; 2W
59	SU1-SU3	—	3	S1100-B; SX1100-B; STC02SYAN	KYCON; KYCON; SULLINS ELECTRONICS CORP.	SX1100- B	TEST POINT; JUMPER; STR; TOTAL LENGTH=0.24IN; BLACK; INSULATION=PBT; PHOSPHOR BRONZE CONTACT=GOLD PLATED
60	SW1	—	1	GT21MCBE	C&K COMPONENTS	GT21MC BE	SWITCH; DPDT; THROUGH HOLE; 20V; 0.4VA; GT SERIES; SEALED ULTRAMINIATURE TOGGLE SWITCH; RCOIL= 0.05 OHM; RINSULATION=10G OHM; C&K COMPONENTS
61	U1	—	1	MAX15157DATJ+	MAXIM	MAX1515 7DATJ+	IC; 60V CURRENT MODE BUCK CONTROLLER; TQFN32-EP
62	U2	—	1	MAX15062CATA+	MAXIM	MAX1506 2CATA+	IC; CONV; ULTRA-SMALL; HIGH EFFICIENCY; SYNCHRONOUS STEP-DOWN DC-DC CONVERTER; TDFN8
63	VIN, VOUT	—	2	5010	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE=0.063IN; RED; PHOSPHOR BRONZE WIRE SIL
64	PCB	—	1	MAX15157D	MAXIM	PCB	PCB:MAX15157D
65	C15, C29-C33, C50	DNP	0	—	—	—	CAP; SMT (0603)
66	C16	DNP	0	—	—	—	CAP; SMT (0805)
67	C62-C73	DNP	0	—	—	—	CAP; SMT (1210)
68	COMP, FB, OVP	DNP	0	—	—	—	TEST POINT; PIN DIA=0.125IN
69	D6, D7	DNP	0	—	—	—	DIODE; SMT (SOD-323)
70	J9	DNP	0	—	—	—	MACHINE SCREW; THUMBSCREW; BANANA; 1/4-32IN; 11/32IN; NICKEL PLATED BRASS
71	JU2, JU5, JU6	DNP	0	—	—	—	CONNECTOR; MALE; THROUGH HOLE
72	M3-M6	DNP	0	—	—	—	TRAN; NCH; PG-TDSON8
73	R1, R5, R26, R29, R31, R32, R40, R46, R55- R57, R59, R60, R63	DNP	0	—	—	—	RES; SMT (0603)
74	R27, R28	DNP	0	—	—	—	RES; SMT (0612)
75	R47	DNP	0	—	—	—	RES; SMT (1225)
TOTAL			176				



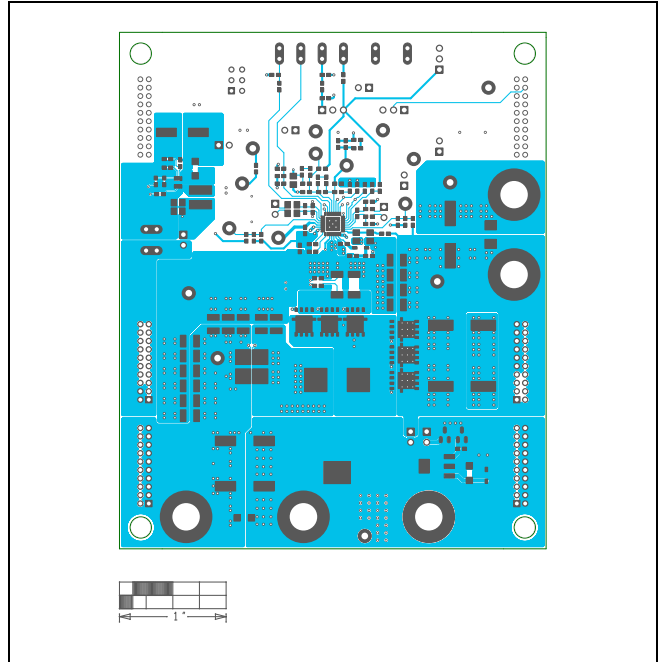
MAX15157D EV Kit Schematic



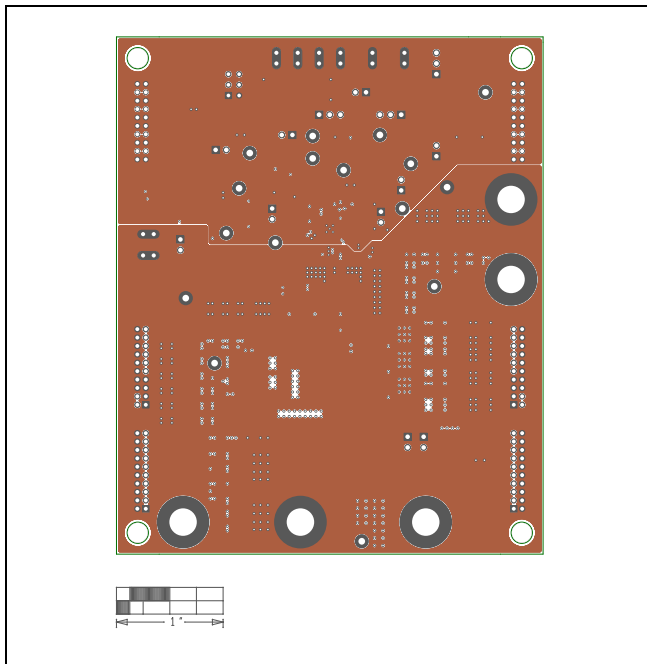
MAX15157D EV Kit PCB Layout



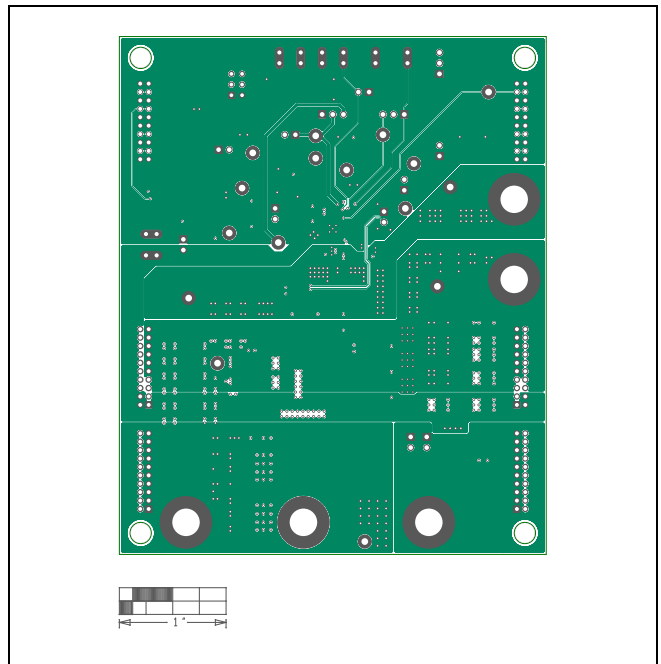
MAX15157D EV Kit Component Placement Guide—Top Silkscreen



MAX15157D EV Kit PCB Layout—Top



MAX15157D EV Kit PCB Layout—Layer 2



MAX15157D EV Kit PCB Layout—Layer 3



**Revision History**

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	6/21	Initial release	—

For pricing, delivery, and ordering information, please visit Maxim Integrated's online storefront at <https://www.maximintegrated.com/en/storefront/storefront.html>.

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