

Designator	Type	Parts Value	Description	Product Name	Manufacturer	Footprint
-	EVALUATION BOARD	-	Board	Evaluation board	-	-
C104	Capacitor	0.1uF	50V,±10%	CGA2B3X7R1H104K050BB	TDK	1005
C105,C106,C107,C108,C109,C110	Capacitor	4700pF	50V,±10%	CGA2B2X7R1H472K050BE	TDK	1005
C19, C20, C24, C25, C27, C28, C29, C30, C36, C37, C38, C49, C52, C55	Capacitor	0.1uF	50V,±10%	CGA2B3X5R1H104K050BB	TDK	1005
C22	Capacitor	22000pF	50V,±10%	CGA2B3X7R1H223K050BB	TDK	1005
C23, C39	Capacitor	100pF	50V,±10%	CGA2B2C0G1H101J050BA	TDK	1005
C26,C31	Capacitor	470nF	50V,±10%	CGA3E3X7R1H474K080AB	TDK	1608
C33	Aluminum Electrolytic Capacito	100uF	50V,±10%	UBT1H101MPD8	Nichicon	φD×L(mm):10x20
C34,C46,C47,C50,C54	Aluminum Electrolytic Capacito	330uF	50V,±10%	UBT1H331MHD8	Nichicon	φD×L(mm):12.5x20
C40	Capacitor	1uF	16V	CGA3E1X7R1C105K080AC	TDK	1608
C48,C51,C56	Capacitor	0.1uF	50V,±10%	CGA2B3X7R1H104K050BB	TDK	1005
C53	Aluminum Electrolytic Capacitor	1000uF	50V,±10%	UBT1H102MHD8	Nichicon	16x31.5
CK1	OSCILLATOR	10MHz	±0.5%,40Ω,33pF	CSTNE10M0G55A	Murata	CSTCE_G_A
CN1	Header Connector	-	-	HDR 2X4	-	HDR(2X4)
CN3	Header Connector	-	-	HDR 1X6	-	HDR(1X6)
CN4	Header Connector	-	-	HDR 1X4	-	HDR(1X4)
CN5, CN7	Connector	-	-	OSTT7022150	ON-SHORE TECHNOLOGY	-
CN6	Connector	-	-	OSTT7032150	ON-SHORE TECHNOLOGY	-
D1, D2, D3, D4, D5, D6	Diode	-	-	RRE01VM4SFHTE-17	ROHM	D 3216
D10	Diode	-	-	RR1LAM4STF	ROHM	D1F60
D9	Zenner Diode	30V	-	KDZVTF30B	ROHM	D MCR50WLEAD
DCIN1	CHECK PIN	-	Test Pin, Through Hole	LC-2-G Yellow	-	TP/1.6/2.3
DCIN2,LCSET1,SSU1,SSD1,PROP1,INTG1	CHECK PIN	-	Test Pin, Through Hole	LC-2-G Yellow	-	TP/1.6/2.3
RREF1,PCG1,PCI1,OCPI,OCL1	CHECK PIN	-	Test Pin, Through Hole	LC-2-G White	-	TP/1.6/2.3
FGO1.VS U1.VS V1.VS W1	CHECK PIN	-	Test Pin, Through Hole	LC-2-G White	-	TP/1.6/2.3
J1, J16	Jumper	-	-	-	-	SS/1.5X1.5/0.5
J15	Jumper	-	-	-	-	SS/1.5X1.5/0.5
L2	Inductor	1.3uH	±20%	XAL1350-132MED	CoilCraft	14mm□
L3	Common mode choke	500Ω10MHz	Commom mode choke	PLT10HH501100PN	murata	12.9x6.6
L4		ショート				1608
M1, M2, M3, M4, M5, M6	Nch MOSFET	-	Nch MOSFET	Under development	ROHM	MOSFET(5X6)
PWM11	CHECK PIN	-	Test Pin, Through Hole	LC-2-G Yellow	-	TP/1.6/2.3
R1, R7, R13	Resistor	470Ω	50V,±1%	MCR03EZPFX2400	ROHM	1608
R19, R21	Resistor	2.2kΩ	50V,±1%	MCR01MZPF2201	ROHM	1005
R2, R8, R14, R20, R23, R42, R46	Resistor	47kΩ	50V,±1%	MCR01MZPF4702	ROHM	1005
R22	Resistor	10Ω	50V,±1%	MCR01MZPF10R0	ROHM	1005
R24	Resistor	1.4kΩ	50V,±1%	MCR01MZPF1401	ROHM	1005
R3, R9, R15	Resistor	24Ω	50V,±1%	MCR03EZPFX24R0	ROHM	1608
R33	Resistor	75Ω	50V,±1%	MCR01MZPF75R0	ROHM	1005
R34, R43, R44	Resistor	0Ω	50V	MCR01PZPJ000	ROHM	1005
R35	Resistor	100Ω	50V,±1%	MCR01MZPF1000	ROHM	1005
R4, R10, R16	Resistor	51Ω	50V,±1%	MCR03EZPFX51R0	ROHM	1608
R47	Resistor	2.4kΩ	50V,±1%	MCR01MZPF2401	ROHM	1005
R48, R49, R74	Resistor	150Ω	50V,±1%	MCR01MZPF1500	ROHM	1005
R5, R11, R17	Resistor	270Ω	50V,±1%	MCR03EZPFX75R0	ROHM	1608
R6, R12, R18, R32, R45	Resistor	10kΩ	50V,±1%	MCR01MZPF1002	ROHM	1005
R75	Resistor	1MΩ	50V,±1%	MCR01MZPF1004	ROHM	1005
R76	-	ショート				JUMPER(B)
RT1	NTC THERMISTORS	100kΩ	Thermistor	NTCG164KF104FTDS	TDK	1608
SR1	Resistor	1mΩ/4W	Shunt Resistor	PSR400ITQFH1L00	ROHM	PSR400
SW1, SW2, SW3,SW4, SW5, SW6	3 state switch	-	Switch	FT 1E-2M-Z	NIDEC COPAL	SW FT1E-2M-Z
TR1, TR2	SILICON TRANSISTOR	-	NPN Transistor	2SC4081U3T106R	ROHM	TR UMT3 SC-70 SOT-323
TR3	SILICON TRANSISTORS	-	NPN Digital Transistor	DTC143EU3HZGT106	ROHM	TR UMT3 SC-70 SOT-323
TR4	SILICON TRANSISTORS	-	PNP Digital Transistor	DTA123EU3HZGT106	ROHM	TR UMT3 SC-70 SOT-323
U1	INTEGRATED CIRCUITS	-	3 Phase Motor Driver	BD63030EKV-C	ROHM	TQFP-64V
VR1, VR2, VR3, VR4, VR5, VR6, VR7, VR8, VR9, VR10, VR11	Resistor	50kΩ	Variable Resistor	CT-6EP 50k Ohm	NIDEC COPAL	CT-6EP
VSUP1	CHECK PIN	-	Test Pin, Through Hole	LC-2-G Red	-	TP/1.6/2.3

Important Notes on the Use of Reference Designs

- 1) The contents of this document are subject to change without notice for the purpose of improvement.
- 2) ROHM provides reference designs (including, but not limited to, circuit diagrams, layout data, parts lists, reference boards and their evaluation results, etc.) and all materials related to evaluation boards (hereinafter collectively referred to as "Reference Designs, etc.") to customers for the purpose of referencing them in the development of devices, equipment, software, etc. incorporating ROHM products (hereinafter collectively referred to as "Customer Products"). The design, verification, etc. required for the development of the Customer's Product shall be done at the customer's responsibility and expense. In no event shall the customer use the Reference Designs, etc. for any purpose other than the purpose mentioned above.
- 3) Reference Designs, etc. are provided on an "as is" basis. ROHM disclaims all warranties, express or implied, including, but not limited to, warranties of usefulness, functionality, accuracy, merchantability, and fitness for a particular purpose. In no event shall ROHM be liable for any damages (including, but not limited to, lost profits or other incidental, consequential, or punitive damages) arising out of, related to or in connection with the use of or application of the Reference Designs, etc. whether in contract or tort. For the avoidance of doubt, ROHM does not warrant that the Reference Designs, etc. will work with the Customer's Product.
- 4) When using Reference Designs, etc. be sure to request and verify the latest specifications (including the specifications of the products that compose the Reference Design, etc.) separately.
- 5) The customer shall be responsible for implementing safety measures such as derating, redundant design, fire prevention, backup, and fail-safe measures, etc., to prevent personal injury, fire damage, etc., caused by the Customer's Product developed with Reference Designs, etc. ROHM assumes no liability whatsoever for any use in excess of the ratings or in case of failure to observe the instructions for use.
- 6) The application circuit examples, constants, and other information provided in Reference Designs, etc. are intended to illustrate standard operation and usage. Therefore, when designing for mass production, please take into account various external conditions.
- 7) Reference Designs, etc. are intended to show typical operations and examples of application circuits, etc., and do not constitute a license, express or implied, to implement or use any intellectual property rights or any other rights of ROHM or any other company. ROHM shall not be liable for any disputes arising from, related to or in connection with the use of the Reference Designs, etc.
- 8) Please make sure to contact ROHM and obtain ROHM's consent before using the Reference Designs, etc. for the following Customer's Product that requires particularly high reliability. Transportation equipment (in-vehicle, ship, railroad, etc.), trunk line communication equipment, traffic signal equipment, disaster and security equipment, safety equipment, medical equipment, servers, solar cells, power transmission systems, etc.
- 9) Do not use Reference Designs, etc. for the following Customer's Product that requires extremely high reliability. Aerospace equipment, nuclear power control equipment, submarine relay equipment, etc.
- 10) Do not use Reference Designs, etc. for military use, such as development of weapons of mass destruction, or for any other military purpose.
- 11) ROHM does not assume any liability for any accidents or damages caused by non-compliance with the descriptions in this document.
- 12) The information contained in this document has been carefully prepared to ensure accuracy. However, ROHM shall not be liable for any loss or damage incurred by customers due to errors or misprints in this document.
- 13) Do not reproduce or duplicate any part of this document in any form or by any means without ROHM's permission.



Thank you for your accessing to ROHM product informations.
More detail product informations and catalogs are available, please contact us.

ROHM Customer Support System

<http://www.rohm.com/contact/>