


Bill of Material (BOM)						RDHP-1702				
Product name:		RDHP-1702								
PCB Number:		RDHP-1702-1								
Version:		v1-1								
Creation Date:		19.04.2017								
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Value	Designator	Part Description	Package	Parameters	Temperature Range	Quantity	Mounting	Second Source	Manufacturer 1	Type Designation 1
33p	C100, C200	Ceramic Chip Capacitor	0603	NP0,C0G/50V/5%	-55 to +125°C	2	SMT	Y		
10n	C101, C201	Ceramic Chip Capacitor	0603	X7R/25V/10%	-55 to +125°C	2	SMT	Y		
4u7	C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211	Ceramic Chip Capacitor	1206	X7R/25V/10%	-55 to +125°C	20	SMT	Y		
1n	C300, C301, C316, C317	Ceramic Chip Capacitor	0603	NP0,C0G/25V/5%	-55 to +125°C	4	SMT	Y		
100n	C302, C303, C305, C315	Ceramic Chip Capacitor	0603	X7R/25V/10%	-55 to +125°C	4	SMT	Y		
4u7	C304, C306, C309, C311, C313	Ceramic Chip Capacitor	0805	X7R/16V/10%	-55 to +125°C	5	SMT	Y		
220p	C307	Ceramic Chip Capacitor	0603	NP0,C0G/16V/10%	-55 to +125°C	1	SMT	Y		
1n	C308	Ceramic Chip Capacitor	0805	X7R/50V/5%	-55 to +125°C	1	SMT	Y		
100n	C310	Ceramic Chip Capacitor	0805	X7R/100V/10%	-55 to +125°C	1	SMT	Y		
470n	C312, C314	Ceramic Chip Capacitor	0603	X7R/16V/10%	-55 to +125°C	2	SMT	Y		
BAS416	D100, D200	Low Leakage Diode	SOD323	75V/200mA/250mW	-65 to +150°C	2	SMT	N	NXP	BAS416
PMEG4050ETP	D101, D201	Schottky Diode	SOD128	40V/5A/750mW	-55 to +175°C	2	SMT	N	NXP	PMEG4050ETP
ES1B	D102, D202	Rectifier Diode	SMA	100V/1A/1.47W	-50 to +150°C	2	SMT	N	FAIRCHILD	ES1B
220V	D103, D104, D105, D106, D107, D203, D204, D205, D206, D207	Transient Voltage Suppressor	SMB	600W/5%	-65 to -150°C	10	SMT	N	Littelfuse	P6SMB220A-E3
220V	D108, D208	Transient Voltage Suppressor	SMB	600W/5%	-65 to +150°C	2	SMT	N	Littelfuse	P6SMB220CA
BAT54S	D300, D301, D302, D303	Dual High Speed Diode 30V, Connected in Series	SOT23	30V/200mA/230mW	-65 to +125°C	4	SMT	Y	NXP	BAT54S
1N4148WS	D304	Low Leakage Diode	SOD323	75V/150mA/200mW	-55 to +150°C	1	SMT	N	Vishay	1N4148WS
PMEG4010CEJ	D305	Schottky Diode	SOD323F	40V/1A/350mW	-65 to +150°C	1	SMT	N	NXP	PMEG4010CEJ
SN74AHC1G08	IC300, IC301	2-Input AND Gate	SC70-5	2.0V to 5.5V/20mA	-40 to +125°C (Ta)	2	SMT	N	Texas Instruments	SN74AHC1G08QDCKRQ1
LMC555IM	IC302	Precision Timer	SOIC-D	4.5V to 16V/200mA	-40 to +105°C (Ta)	1	SMT	N	Texas Instruments	LMC555IM
SID1183K	IC303, IC304	SCALE-IDRIVER	eSOP-R16B	4.75V to 5.25V/250kHz/1790mW/8.0A	-40 to +125°C	2	SMT	N	power integrations	SID1183K
NC7WZ14	IC305	UHS Inverter Schmitt Trigger	SC70-6	1.65V to 5.5V/100mA	-40 to +125°C (Ta)	1	SMT	N	Fairchild	NC7WZ14EP6X
PMV45EN2	Q300	Logic level N-Channel MOSFET	SOT23	30V/4.1A/510mW/35mOhm	-55 to +150°C	1	SMT	N	NXP	PMV45EN2
120k	R100, R200	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	2	SMT	Y		
150k	R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212	Thick Film Chip Resistor	1206	1%/0.25W/200V	-55 to +155°C	24	SMT	Y		
22k	R113, R213	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	2	SMT	Y		
N.A.	R114, R116, R214, R216	Power Metal Film Resistor	Axial-0.6	5%/2W/500V/PR02	-55 to +155°C	4	THT	N	VISHAY	
N.A.	R115a, R115b, R115c, R115d, R117a, R117b, R117c, R117d, R215a, R215b, R215c, R215d, R217a, R217b, R217c, R217d	Thick Film Chip Resistor	1206	1%/0.25W/200V/CRCWe3	-55 to +155°C	16	SMT	N	Vishay	
100R	R300, R301	Thick Film Chip Resistor	0603	1%/0.1W/75V/CRCWe3	-55 to +155°C	2	SMT	N	Vishay	CRCW0603100RFKE
220R	R302, R303	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	2	SMT	Y		
10k	R304, R305, R312, R313	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	4	SMT	Y		
4k7	R306, R307	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	2	SMT	Y		
4k22	R308	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	1	SMT	Y		
1k2	R309	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	1	SMT	Y		
100R	R310	Thick Film Chip Resistor	0603	1%/0.1W/50V	-55 to +155°C	1	SMT	Y		
4k7	R311	Thick Film Chip Resistor	0805	1%/0.125W/150V	-55 to +155°C	1	SMT	Y		
BV129.0010	TR300					1	THT	N	Contact PI Sales	
2Pin Header	X100, X101, X200, X201	Terminal Block	1x2Pin, Pitch 2.54	150V/6A/2Pin/2.54mm	-40 to +105°C	4	THT	N	Wuerth Electronic	691210910002
10Pin Male Box Header	X300	Eject Latch Header	2x5Pin, Pitch 2.54	500V/3A/10Pin/2.54mm/180°	-55 to +125°C	1	THT	N	Wuerth Elektronik	61201022821
RDHP-1702-1	Z1	Printed Circuit Board	N			1	N	N		

Legend:

- Mounting: "N" means that the corresponding entry is not a component that must be assembled onto the PCB (accessories, ...).
- Second Source: "N" means that only the listed components from Manufacturer 1/Type Designation 1 to Manufacturer 3/Type Designation 3 can be used.
"Y" means that all components with a generic release that fulfill the given requirements (value, package, parameters and temperature range) can be used.
- The values listed in the "Temperature Range" column refer to the component temperature (junction, film, ...) unless otherwise specified. If "(Ta)" is indicated, the given values refer to the ambient temperature