

**NOTE: Parts specified are for ONE BOARD ONLY (ONE BOARD = ONE CHANNEL)**  
**The SKU P-DIYAB-2V20 contains two boards!**

Part	Description	Value	Rating	Alternate Value / Comment
Q1	NPN Input Transistor (LTP)	SS9014		see Build Guide "Ideas and Alternatives"
Q2	NPN Input Transistor (LTP)	SS9014		see Build Guide "Ideas and Alternatives"
Q3	NPN Transistor (Cascode/Current Mirror)	KSC1845		see Build Guide "Ideas and Alternatives"
Q4	NPN Transistor (Cascode/Current Mirror)	KSC1845		see Build Guide "Ideas and Alternatives"
Q5	PNP Transistor (Cascode/Current Mirror)	KSA992		see Build Guide "Ideas and Alternatives"
Q6	PNP Transistor (Cascode/Current Mirror)	KSA992		see Build Guide "Ideas and Alternatives"
Q7	NPN Transistor (LTP CCS)	KSC1845		see Build Guide "Ideas and Alternatives"
Q8	NPN Transistor (LTP CCS)	KSC1845		see Build Guide "Ideas and Alternatives"
Q9	PNP Transistor (VAS/CCS)	KSA992		see Build Guide "Ideas and Alternatives"
Q10	PNP Transistor (VAS/CCS)	2SA1381		see Build Guide "Ideas and Alternatives"
Q11	NPN Transistor (VAS/CCS)	2SC3503		see Build Guide "Ideas and Alternatives"
Q12	NPN Transistor (VAS/CCS)	2SC3503		see Build Guide "Ideas and Alternatives"
Q13	NPN Transistor (VBE Multiplier)	2SC3503		see Build Guide "Ideas and Alternatives"
Q14	NPN Driver Transistor	MJE15032		see Build Guide "Ideas and Alternatives"
Q15	PNP Driver Transistor	MJE15033		see Build Guide "Ideas and Alternatives"
Q16	NPN Output Transistor	NJW0281		see Build Guide "Ideas and Alternatives"
Q17	NPN Output Transistor	NJW0281		see Build Guide "Ideas and Alternatives"
Q18	NPN Output Transistor	NJW0281		see Build Guide "Ideas and Alternatives"
Q19	PNP Output Transistor	NJW0302		see Build Guide "Ideas and Alternatives"
Q20	PNP Output Transistor	NJW0302		see Build Guide "Ideas and Alternatives"
Q21	PNP Output Transistor	NJW0302		see Build Guide "Ideas and Alternatives"

D1	Fast Switching Diode	1N914		1N4148
D2	Fast Switching Diode	1N914		1N4148
D3	15V Zener Diode 1/2W - 1W	1N4744A		1N5245B
D4	Ultrafast Rectifier	MURS320		1N5408 or any suitable 3A rectifier
D5	Ultrafast Rectifier	MURS320		1N5408 or any suitable 3A rectifier
D6	Light Emitting Diode	Red	3mm	Round type
D7	Light Emitting Diode	Blue	3mm	Round type
D8	Ultrafast Rectifier	MURS320		1N5408 or any suitable 3A rectifier
D9	Ultrafast Rectifier	MURS320		1N5408 or any suitable 3A rectifier

R1	Resistor	100K	1/4W	5% or better
R2	Resistor	820R	1/4W	5% or better
R3	Resistor	33K	1/4W	5% or better
R4	Resistor	4.7R	1/4W	5% or better
R5	Resistor	820R	1/4W	5% or better
R6	Resistor	33K	1/4W	5% or better
R7	Multiturn Trimmer Resistor	200R		5mm total LS (2.5 + 2.5) 10-20 turns
R8	Resistor	100R	1/4W	1% or better
R9	Resistor	100R	1/4W	1% or better
R10	Resistor	22R	1/4W	5% or better
R11	Resistor	10K	1/4W	5% or better
R12	Resistor	10K	1/4W	5% or better
R13	Resistor	15K	1/4W	5% or better
R14	Resistor	2.2K	1/4W	5% or better
R15	Resistor	100R	1/4W	5% or better
R16	Resistor	100R	1/4W	5% or better
R17	Multiturn Trimmer Resistor	1K		5mm total LS (2.5 + 2.5) 10-20 turns
R18	Resistor	22K	1/4W	5% or better
R19	Resistor	68K	1/4W	5% or better
R20	Resistor	220R	1/4W	1% or better
R21	Resistor	220R	1/4W	1% or better
R22	Resistor	820R	1/4W	5% or better
R23	Resistor	33R	1/2W	5% or better
R24	Resistor	820R	1/4W	5% or better
R25	Resistor	220R	1/4W	5% or better
R26	Resistor	100R	1/4W	5% or better
R27	Resistor	68R	1/2W	5% or better
R28	Resistor	2.2K	1/4W	5% or better

R29	Resistor	680R	1/4W	5% or better
R30	Multiturn Trimmer Resistor	500R		5mm total LS (2.5 + 2.5) 10-20 turns
R31	Resistor	15R	1/4W	5% or better
R32	Resistor	22R	1/2W	5% or better
R33	Resistor	22R	1/2W	5% or better
R34	Resistor	22R	1/4W	5% or better
R35	Resistor	22R	1/4W	5% or better
R36	Resistor	150R	1W	5% or better
R37	Resistor	2.2R	1/2W or 1W	5% or better
R38	Resistor	2.2R	1/2W or 1W	5% or better
R39	Resistor	2.2R	1/2W or 1W	5% or better
R40	Resistor	2.2R	1/2W or 1W	5% or better
R41	Resistor	2.2R	1/2W or 1W	5% or better
R42	Resistor	2.2R	1/2W or 1W	5% or better
R43	Power Resistor	0.22R	5W	Noble Resistors
R44	Power Resistor	0.22R	5W	Noble Resistors
R45	Power Resistor	0.22R	5W	Noble Resistors
R46	Power Resistor	0.22R	5W	Noble Resistors
R47	Power Resistor	0.22R	5W	Noble Resistors
R48	Power Resistor	0.22R	5W	Noble Resistors
R49	Power Resistor	10R	3W	5% or better
R50	Power Resistor	10R	3W	5% or better
R51	Resistor	22K	1/4W	5% or better
R52	Resistor	100K	1/4W	5% or better
R53	Resistor	22R	1/2W	5% or better
R54	Resistor	22R	1/2W	5% or better

C1	Polypropylene Capacitor	4.7uf	35V - 50V	5, 10, 12.5, 15, 22.5, 25mm LS
C2	Polystyrene Capacitor	270pf	50V - 100V	7.5mm LS
C3	Film Capacitor	100nf	35V - 50V	7.5 or 10mm LS
C4	Non-Polar Electrolytic Capacitor	220uf	50V - 100V	12.5 D 5mm LS
C5	Electrolytic Capacitor	22uf - 47uf	63V - 100V	6mm D 3.5mm LS
C6	Film Capacitor	220nf	35V - 50V	7.5 or 10mm LS
C7	Silver Mica	100pf	3V - 500V	
C8	Silver Mica	470pf	3V - 500V	
C9	Electrolytic Capacitor	22uf	35V - 50V	6mm D 3.5mm LS
C10	Film Capacitor	100nf	63V - 100V	7.5 or 10mm LS
C11	Electrolytic Capacitor	220uf	63V - 100V	12.5mm D 5mm LS
C12	Film Capacitor	100nf	63V - 100V	7.5 or 10mm LS
C13	Electrolytic Capacitor	470uf - 1000uf	63V - 100V	16-18mm D 7.5mm LS (5mm for 220uf-470uf)
C14	Film Capacitor	100nf	63V - 100V	7.5 or 10mm LS
C15	Electrolytic Capacitor	220uf	63V - 100V	12.5mm D 5mm LS
C16	Film Capacitor	100nf	63V - 100V	7.5 or 10mm LS
C17	Electrolytic Capacitor	470uf - 1000uf	63V - 100V	16-18mm D 7.5mm LS (5mm for 220uf-470uf)
C18	Silver Mica	47pf	3V - 500V	or Multilayer Ceramic 100V+
C19	Silver Mica	47pf	3V - 500V	or Multilayer Ceramic 100V+
C20	Film Capacitor	680nf - 2.2uf	100V	7.5mm - 10mm LS
C21	Film Capacitor	100nf	250V	10mm LS up to 5mm Width
LC Cap	Silver Mica	2pf - 10pf	3V - 500V	see Build Guide "Ideas and Alternatives"

L1	AWG #18 Enameled Copper	14-16 turns	1.5uH	12.5mm - 15mm Diameter
Misc	FastOn Terminals (5 Pieces)	6.35 X 0.81		
Misc	Euroblock (1 Piece)	2-pin		For Input Connection
Misc	Fuse Clips PCB Mount (4 Pieces)			
Misc	Fuse 4A 250V (2 Pieces)			
Misc	Mica Insulator for TO-3P Devices			6 Pieces
Misc	Mica Insulator for TO-220 Devices			3 Pieces
Misc	Thermal Grease			