

TPA 3255 reference design build:

Designator	Quantity	Value	Manufacturer	Part Number	Pris (samlet)
C1	1	0.047 µf	Murata	GRM155R71 E473KA88D	0,7 kr
C2	1	0,1 µf	Murata	GRM188R72 A104KA 35J	1,32 kr
C3, C32, C33, C47, C48, C83, C84	7	1 µf	Samsung	CL31B105KC HNFNE	5,38 kr
C4	1	2,2 µf	Kemet	C1210C225 K1RACT U	5,7 kr
C5	1	47µf	Panasonic	EEE-FK1C4 70P	2,92 kr
C6	1	4.7µf	Samsung	CL21A475KA QNNNE	0,7 kr
C7	1	5600 pF	Samsung	L10B562KB8NN	0,7 kr
C8, C50	2	0,47 µf	Murata	GRM188R71 E474KA 12D	2,2 kr
C9, C13, C14, C15, C22, C51, C67, C68, C69, C72, C82	11	0.1 µf	Kemet	C0603C104 K5RACT U	3,81 kr
C10	1	100 µf	Panasonic	EEE-FK0J10 1UR	3,13 kr
C11, C26, C37, C45, C61	5	0.01 µf	KYOCERA AVX	06031C103K AT2A	2,47 kr
C12	1	4700 pF	Kemet	C0603X472 K5RACT U	0,7 kr
C16, C53, C70, C81	4	10 µf	TAIYO YUDEN	EMK212BJ1 06KG-T	5,25 kr
C17, C20, C28, C38,	9	10 µf	Panasonic	EE-FK1C100R	12,7 kr

C55, C62, C63, C66, C71					
C18, C23, C57, C65	4	22 pF	Murata	GRM1885C1 H220JA 01D	2.69 kr
C19, C30, C58, C64	4	100 pF	Murata	GRM1885C1 H101JA 01D	2,24 kr
C21, C34, C42, C56	4	1500 µF	Chemi-Con	KZN630ELL152 P1S	72 kr
C24, C35, C43, C59	4	1 µF	WIMA	KS4F041004F0 SSD	31,36 kr
C25, C36, C44, C60	4	1000 pF	KYOCERA AVX	12061A102J AT2A	8,6 kr
C27, C29, C52, C54	4	0.033 µf	Vishay	VJ0603Y333 JXXCW1BC	3,04 kr
C31, C46	2	4700 µf	Chemi-Con	SMH101VSN472 IA40S	54,9 kr
C39	1	47 µf	Panasonic	EE-FK1J470P	5.35 kr
C40, C41	2	1 µf	Vishay	J0603G105KXJC /1BC	1,6 kr
C49	1	0.01 µf	Vishay	VJ0603Y103K XBPW1BC	0,7 kr
D1	1	100 V	Diodes Incorporated	B1100-13-F	2.08 kr
D2	1	Orange	Lite-On	LTST-C170K FKT	1,6 kr
D3	1	Diode, Schottky, 100 V, 3 A, SMA	MCC	SK310-TP	3,06 kr
D4	1	Red	Lite-On	LTST-C170KRKT	1,6 kr
D5	1	Green	Lite-On	LTST-C171G KT	1,53

L1	1	100 µH	Würth Elektronik	7447714101	15.69
L2, L3, L4, L5	4	10 µH	Coilcraft	ER2915L-103KL	15.04 kr
L6	1	10 µH	TAIYO YUDEN	NRS4012T10 0MDGJV	1.67
L7	1	10 µH	Vishay-Dale	IFSC0806AZE R100M01	2.92 kr
Q1, Q2	2	60 V	Diodes Incorporated	2N7002-7-F	2.64 kr
R1, R3, R4, R12, R30, R44, R46	7	0.1 W	Vishay-Dale	CRCW0603 0000Z0E A	4.9 kr
R2	1	182 k	Panasonic	ERJ-6ENF1 823V	0.7 kr
R5, R10, R19, R23, R33, R35	6	100	Vishay-Dale	CRCW060310 0RFKEA	1.2 kr
R6	1	100k	Vishay-Dale	CRCW0603 100KFKE A	0.7 kr
R7, R8, R20, R21, R25, R27, R37, R38, R41, R42	10	10k	YAGEO	RT0603BRD 0710KL	7.25 kr
R9, R43, R45, R48	4	100k	Vishay-Dale	CRCW0402 100KFKE D	1.2 kr
R11, R14, R18, R22	4	3,3	Vishay-Dale	CRCW0603 3R30JNE A	1.12 kr
R13	1	22k	Yageo America	RC0603FR-0722KL	0.76 kr
R15, R36, R52	3	10k	Vishay-Dale	CRCW0603 10K0FKE A	1.2 kr
R16	1	20k	Yageo America	RC0603FR-0720KL	0.7 kr
R17	1	30k	Yageo America	RC0603FR-0730KL	0.7 kr
R24, R28	2	47k	Yageo	RC0603JR-0	0.67 kr

			America	747KL	
R26	1	3,3 k	Yageo America	C0603FR-073K3	0,7 kr
R29, R31	2	1 k	Vishay-Dale	CRCW0603 1K00FKE A	0,7 kr
R32	1	12k	Panasonic	RJ-3EKF1202V	0,7 kr
R34	1	360	Vishay-Dale	CRCW0402 360RJNED	0,7 kr
R39	1	4.99k	Vishay-Dale	CRCW0402 4K99FKE D	0,7 kr
R40	1	1 k	Vishay-Dale	CRCW04021 K00FKED	0,7 kr
U1	1		Texas Instruments	M5010ASD/NOP	31,75 kr
U2	1		Texas Instruments	M2940IMP-12/N B	14,42 kr
U3	1		Texas Instruments	TLV1117-33I DCY	5,83 kr
U4	1		Texas Instruments	TPA3255DDV R	38,99 kr
U5, U6	2		Texas Instruments	NE5532ADR	6,12 kr
U7	1		Texas Instruments	TPS3802K3 3DCKR	8,52 kr

8-100v to 5v-1a dc to dc buck converter:



MP9486 – 100V INPUT, 1A, STEP-DOWN CONVERTER

TYPICAL APPLICATION CIRCUIT

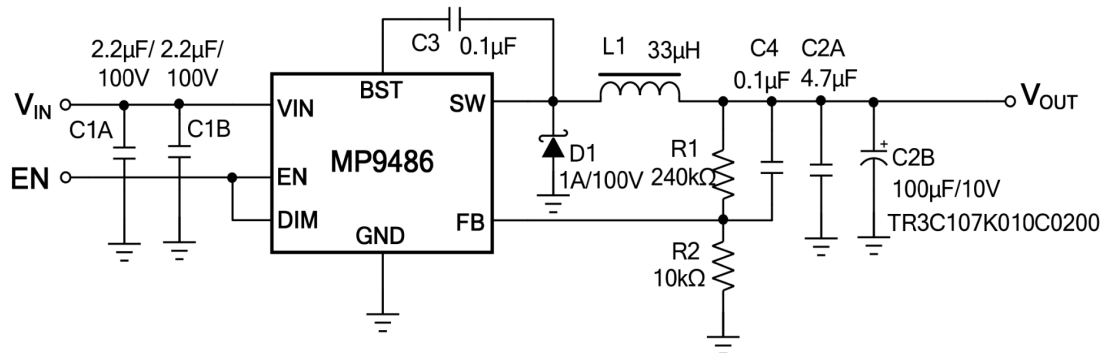


Figure 4: $V_{IN} = 8 \sim 95V$, $V_{OUT} = 5V$, $I_{OUT} = 1A$

Designator	Quantity	Value	Manufacturer	Part number	Price
Regulator	1		MPS	MP9486GN-Z	17,55 kr
C1A, C1B	2	2,2 µf	Würth Elektronik	885012208124	3,62 kr
C2A	1	4,7 µf	Würth Elektronik	885012107013	0,97 kr
C2B	1	100 µF	Vishay	TR3C107K010C0200	5 kr
C3, C4	2	0,1 µf	Würth Elektronik	885012206046	1,4 kr
D1	1	1A/100V	Vishay	VS-10MQ100-M3/5AT	1,94 kr
L1	1	33 µH	Vishay	SC1616AHER33M01	2,23 kr
R1	1	240k Ω	Vishay	SF1WSJT-52-240	1,53 kr
R2	1	10k Ω	Yageo	SF-50JT-52-10K	1,32 kr