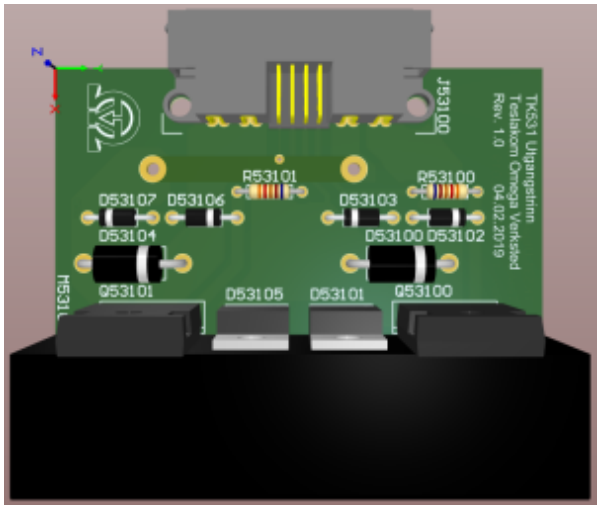
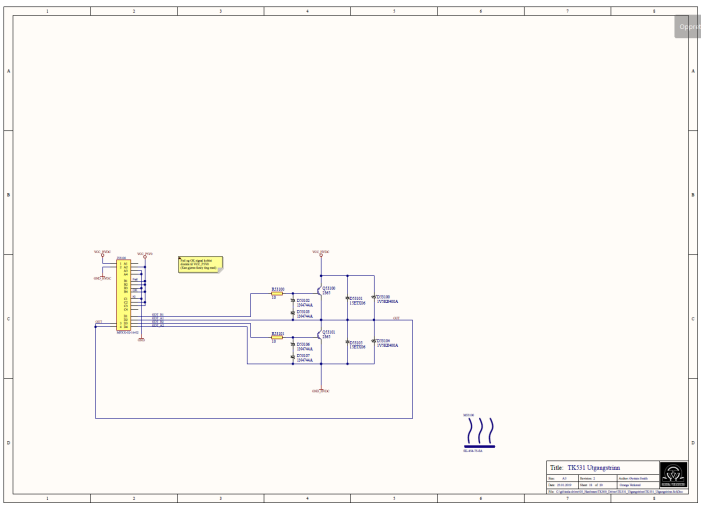
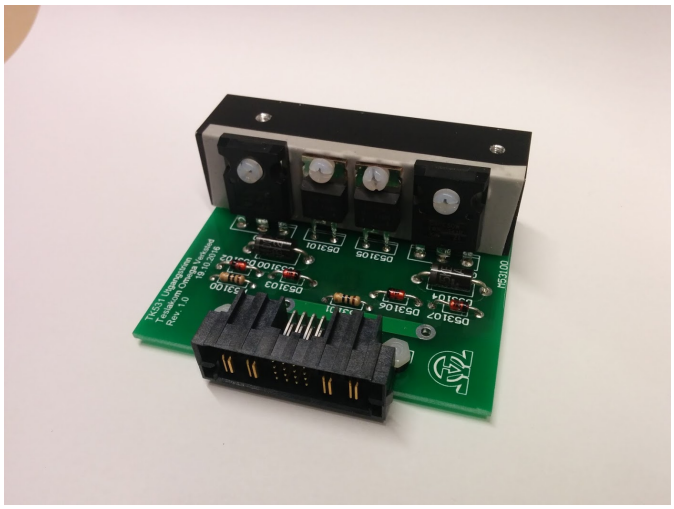
TK531 Utgangstrinn

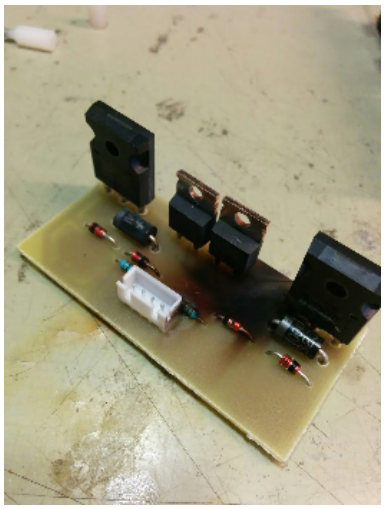
This page is in Norwegian, use google translate.

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Teori

Bakgrunn

TBD

Virkemåte

TBD

Transistorer

Partnr	Marking	Kallenavn	V_{CE}	V_{CE_SAT}	T_{vjmax}	I_{Cpuls}	$R_{th(j-C)}$	$t_{d(on)}$	$t_{d(off)}$
IRG4PC50WPBF	G4PC50W	God gammel	600V	2.25V	150°C	220A	0.64K/W	31ns	210ns
STGW30NC60WD	GW30NC60WD		600V	2.5V	150°C	150A	0.63K/W	29ns	151ns
IKW30N60TFKSA1	K30T60	Ny teit	600V	2.05V	175°C	90A	0.8K/W	24ns	292ns
WG50N65DHWQ	WG50N	Semigod	650V	2V	150°C	200A	0.45K/W	62ns	170ns
IGW75N65H5XKSA1	G75EH5	Galaxy brain	650V	1.65V	175°C	300A	0.38K/W	27ns	194ns
IXYH90N65A5	?	Enda bedre(?), megadyr	650V	<=1.35V	175°C	600A	0.23K/W	40ns	420ns

Parameter	Beskrivelse
V_{CE}	Kollektor - Emitter Breakdown voltage
V_{CE_SAT}	Collector-emitter saturation voltage (max)
T_{vjmax}	Max junction temperature
I_{Cpuls}	Max Pulsed collector current, tp limited by Tvjmax
$R_{th(j-C)}$	IGBT thermal resistance, junction - case
$t_{d(on)}$	Turn-on delay time (at Tj = 150C)
$t_{d(off)}$	Turn-off delay time (at Tj = 150C)



Versjoner

V0.0 (2009)

Changelog

1. Laget av Dewald De Bruyn

Errata

1. Ingen

V0.1 (2014)

Changelog

1. Kokt fra 2009 design
2. Flyttet til eget kort x2

Errata

1. Burde hatt svak pull down på inngangene for å unngå flytende signal

V1.0

Release: 2016-10-19
Antall: 10

Changelog

1. Bakplanifisert

Errata

1. Burde hatt svak pull down på inngangene for å unngå flytende signal
2. Flybackdiodene (D1 og D5) er snudd (Antageligvis feil med OVLib)

V1.1

Release: 2022-05-03

Changelog

1. Fikset flybackdiodene i OVLib og snudd de tilbake riktig vei i utlegget
2. Lagt til 1MOhm pulldown på inngangene
3. Fjernet 531 prefikset fra designatorene, det er implisitt at de sitter på TK531

Errata

1. Ekstra pinner er koblet til jord og VCC, vanskeligere å greenwire inn nye ting
    a. Ingen tilkobling for NTC

Produserte kort

SN	V	Montert	Sprengt? OK = ✓ Sprengt= ⚠	Dioder korrekt vei?	Pull down motstand?	Transistor					Plassering	Kommentar
?	0.0	✓	✓	✓	✗	IRG4PC50WPBF					2009 Driver	
?	0.1	✓	⚠	✓	✗	IRG4PC50WPBF					Teslaskuffen	Sprengt
?	0.1	✓	⚠	✓	✗	IRG4PC50WPBF					Teslaskuffen	Sprengt
?	0.1	✓	✓	✓	✗	IRG4PC50WPBF					2014 Driver	
?	0.1	✓	✓	✓	✗	IRG4PC50WPBF					2014 Driver	
?	0.1	✓	✓	✓	✗	IRG4PC50WPBF					Marintesla	
?	0.1	✓	✓	✓	✗	IRG4PC50WPBF					Marintesla	
01	1.0	✓	⚠	✓	✓	IRG4PC50WPBF						Montert 10MOhm pull down
02	1.0	✓	⚠	✓	✓	IRG4PC50WPBF					Teslaskuffen	Montert 10MOhm pull down
03	1.0	✓	⚠	✓	✗	?						Snudd flybackdioder
04	1.0	✓	⚠	✓	✗	?					?	Snudd flybackdioder
05	1.0	✓	⚠	✗	✗	IRG4PC50WPBF						

06	1.0	✓	⚠	✗	✗	IRG4PC50WPBF					?	
07	1.0	✓	⚠	✗	✗	IRG4PC50WPBF						
08	1.0	✓	⚠	✗	✗	IRG4PC50WPBF						
09	1.1	✓	✓	✓	✓	WG50N65DHWQ					TK500 SN:02	Med thermocouple
10	1.1	✓	✓	✓	✓	WG50N65DHWQ					TK500 SN:02	Med thermocouple
11	1.1	✓	✓	✓	✓	WG50N65DHWQ					Teslaskuffen	
12	1.1	✓	✓	✓	✓	WG50N65DHWQ					Teslaskuffen	
12 igjen?	1.1	✓	✓	✓	✓	WG50N65DHWQ					Teslaskuffen	
1	1.1	✓	✓	✓	✓	STGW30NC60WD					TK500 SN:01	Fra sin tesla, med thermocouple
2	1.1	✓	✓	✓	✓	STGW30NC60WD					TK500 SN:01	Fra sin tesla, med thermocouple