

WPC Power/Driver Board 10033

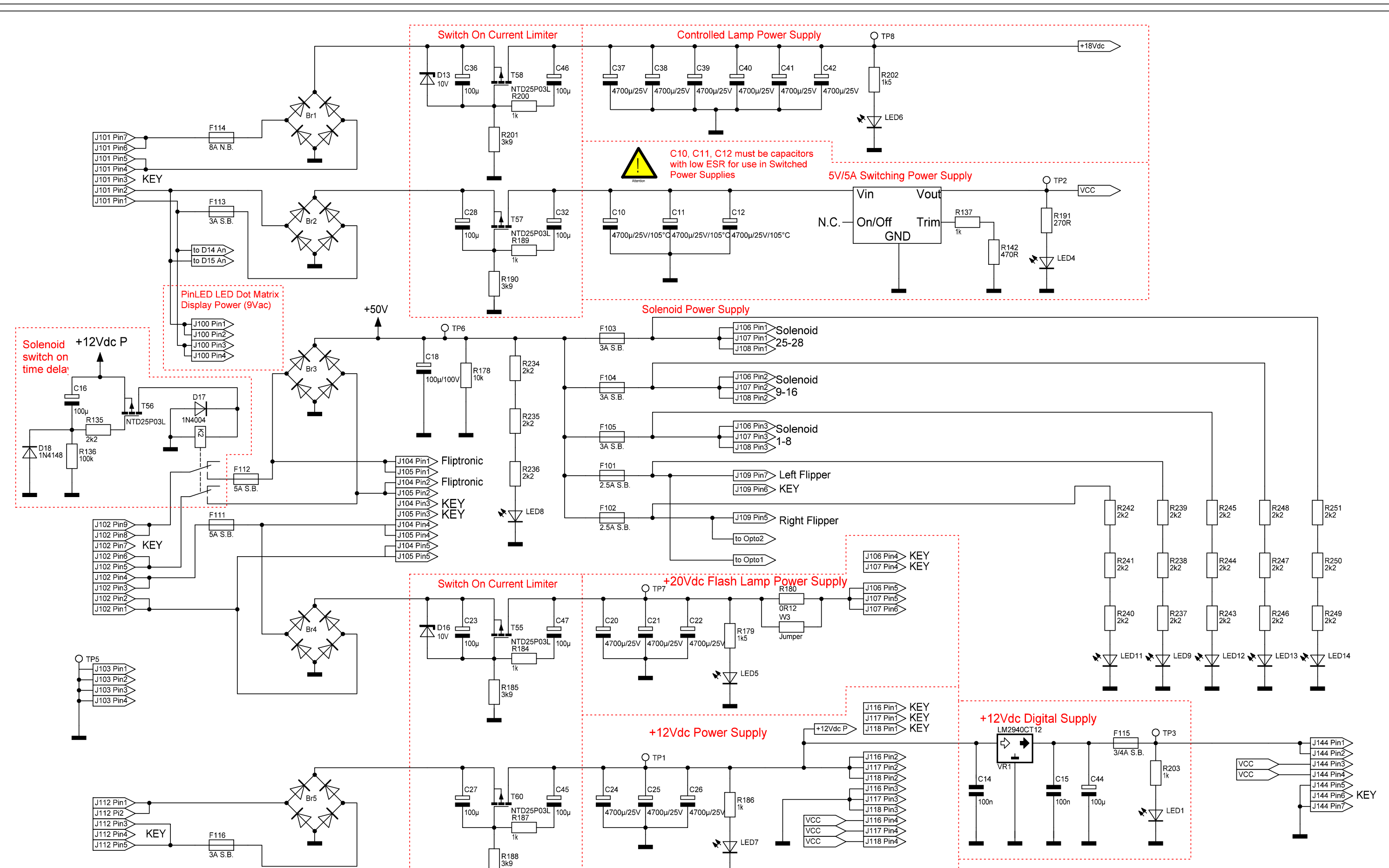
Board Part Number / Platinenbauteilenummer 2005019 Rev.I, J, K

Schematics / Schaltpläne

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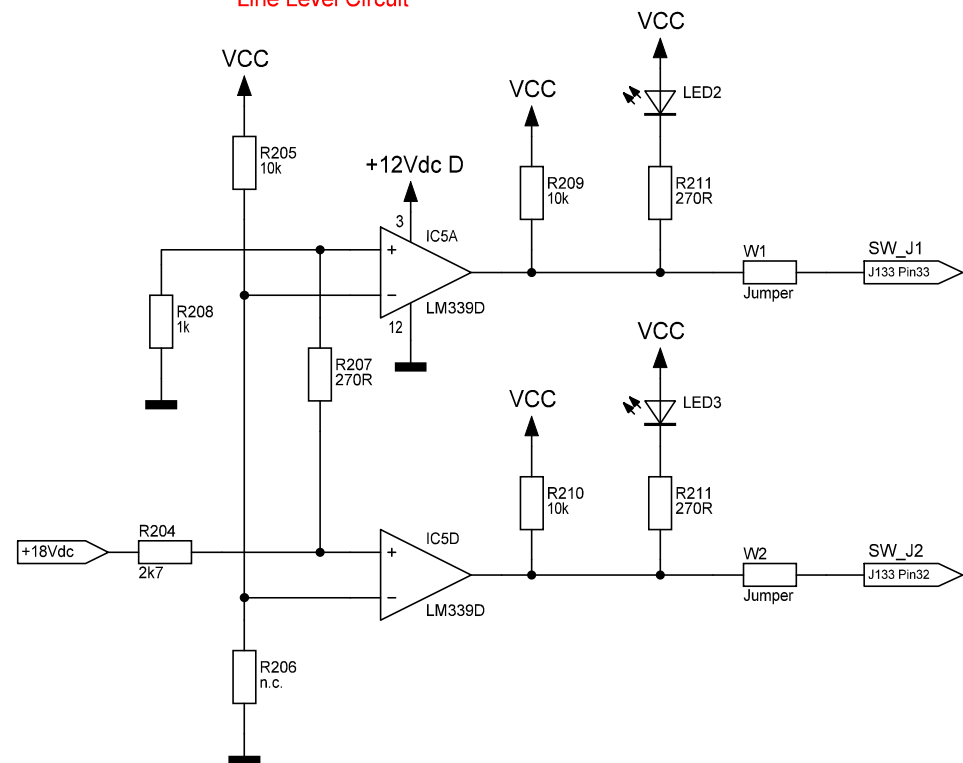
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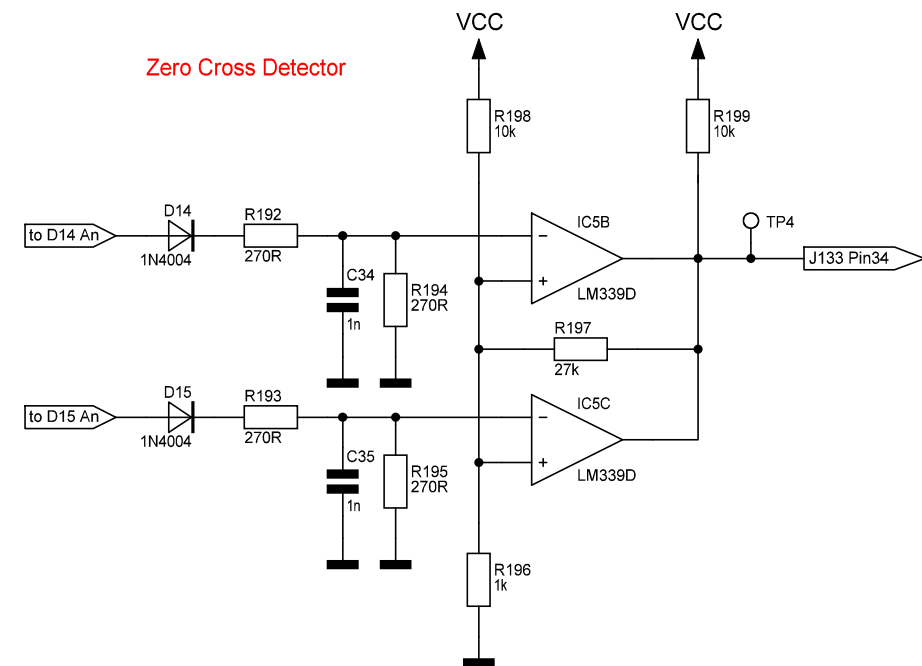


Notes:		
Date: 07/26/05	Power/Rectifier Section PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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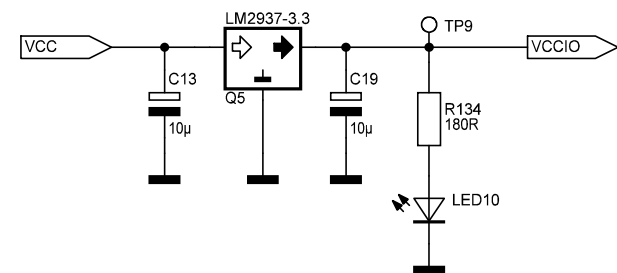
Line Level Circuit



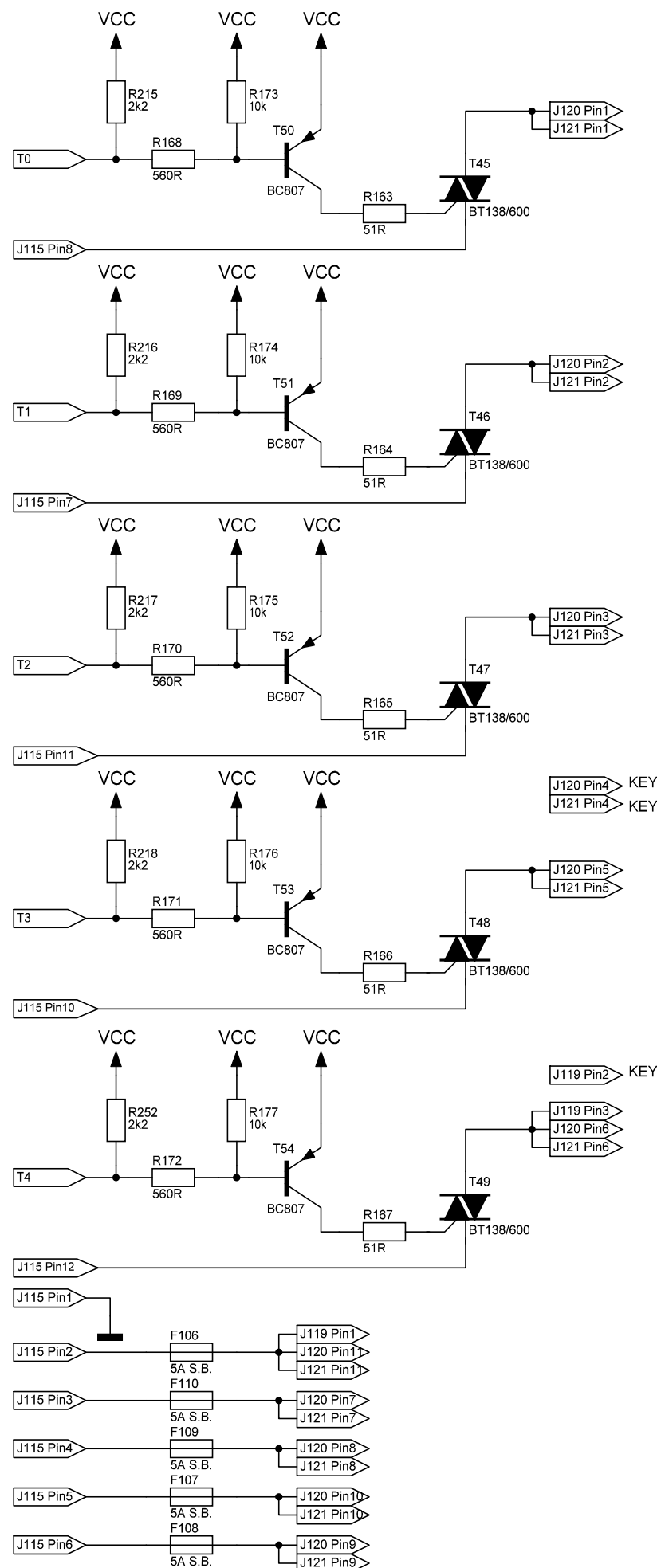
Zero Cross Detector



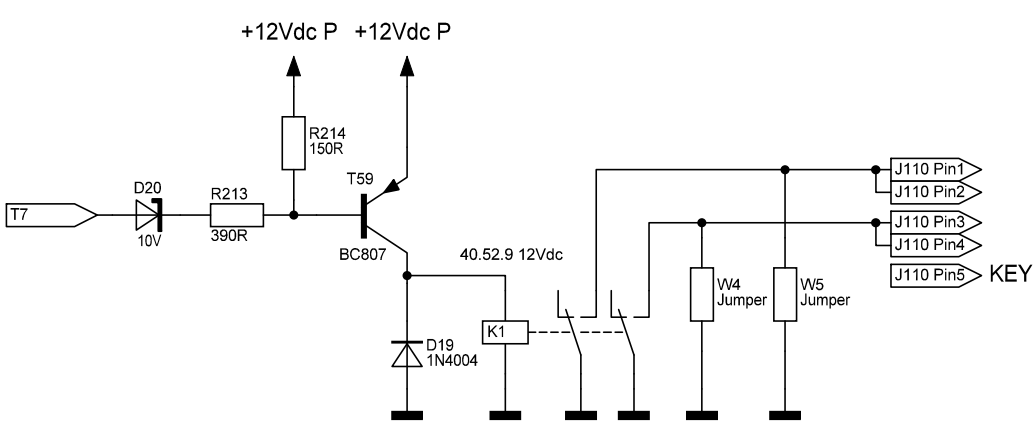
+3.3Vdc Power Supply



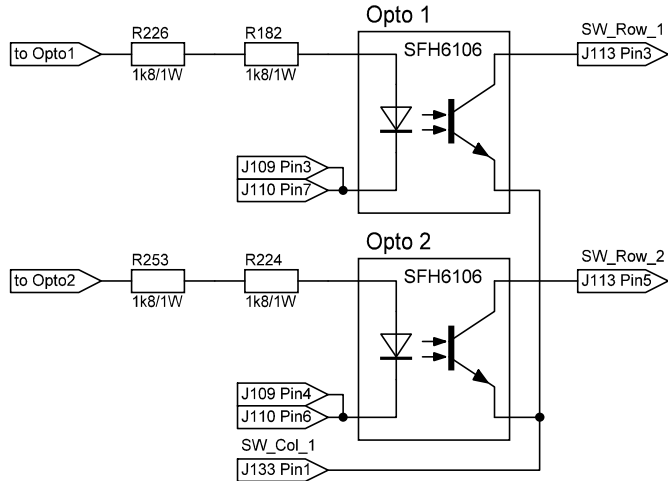
Gen. Illumination



Flipper Enable



Flipper Switches



Notes:

Date: 07/26/05

Name: A.Foerster

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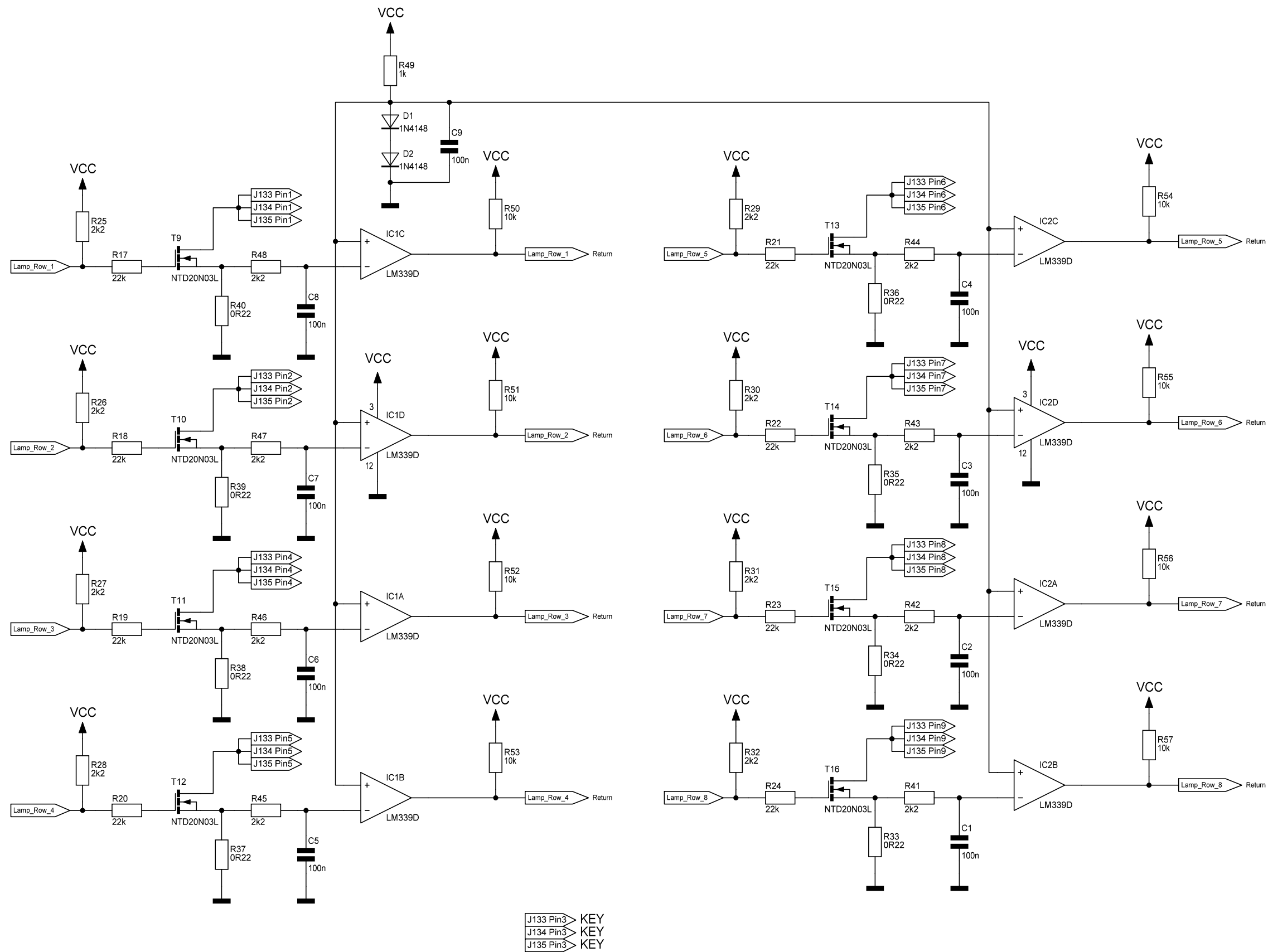
Gen. Illumination, Flipper Enable,
Flipper Switches, Zero Cross Detector

PinLED

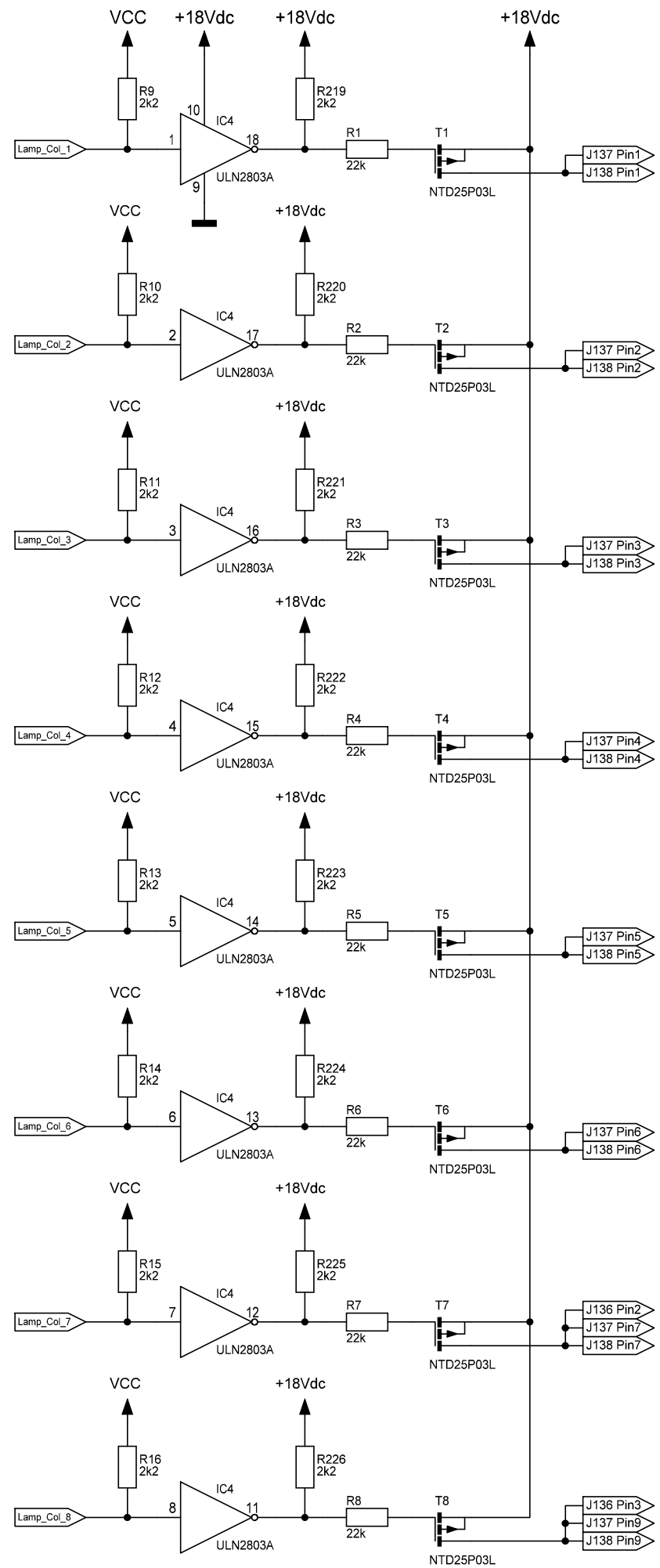
PN: 2005019

Rev: J

Boardname:
10033



Notes:		
Date: 07/26/05	Lamp Rows PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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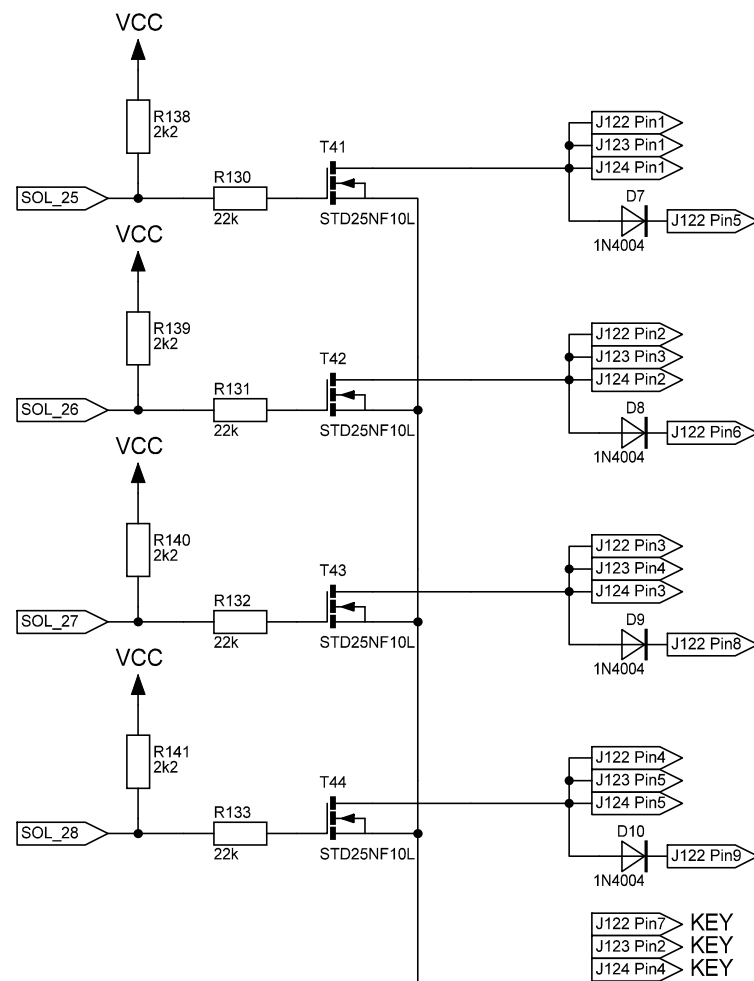
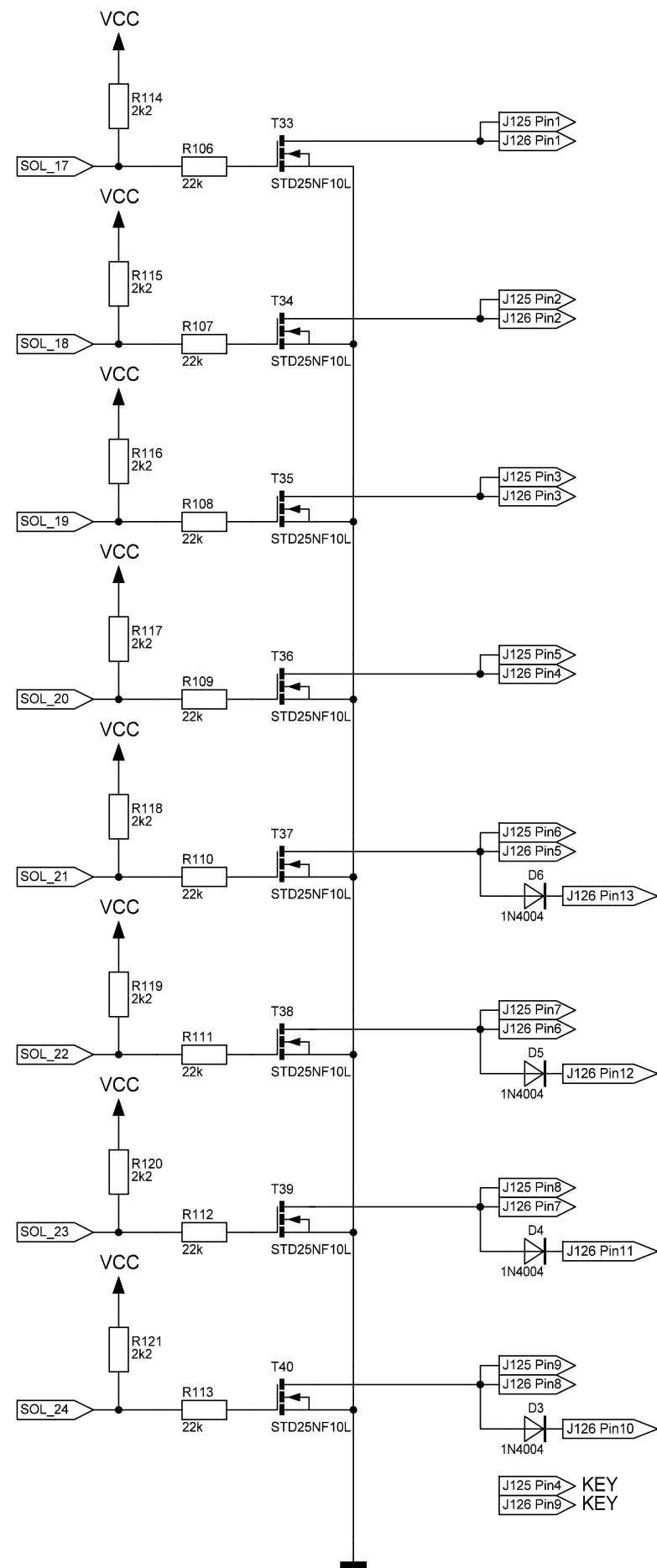


J136 Pin1 KEY
J137 Pin8 KEY
J138 Pin8 KEY

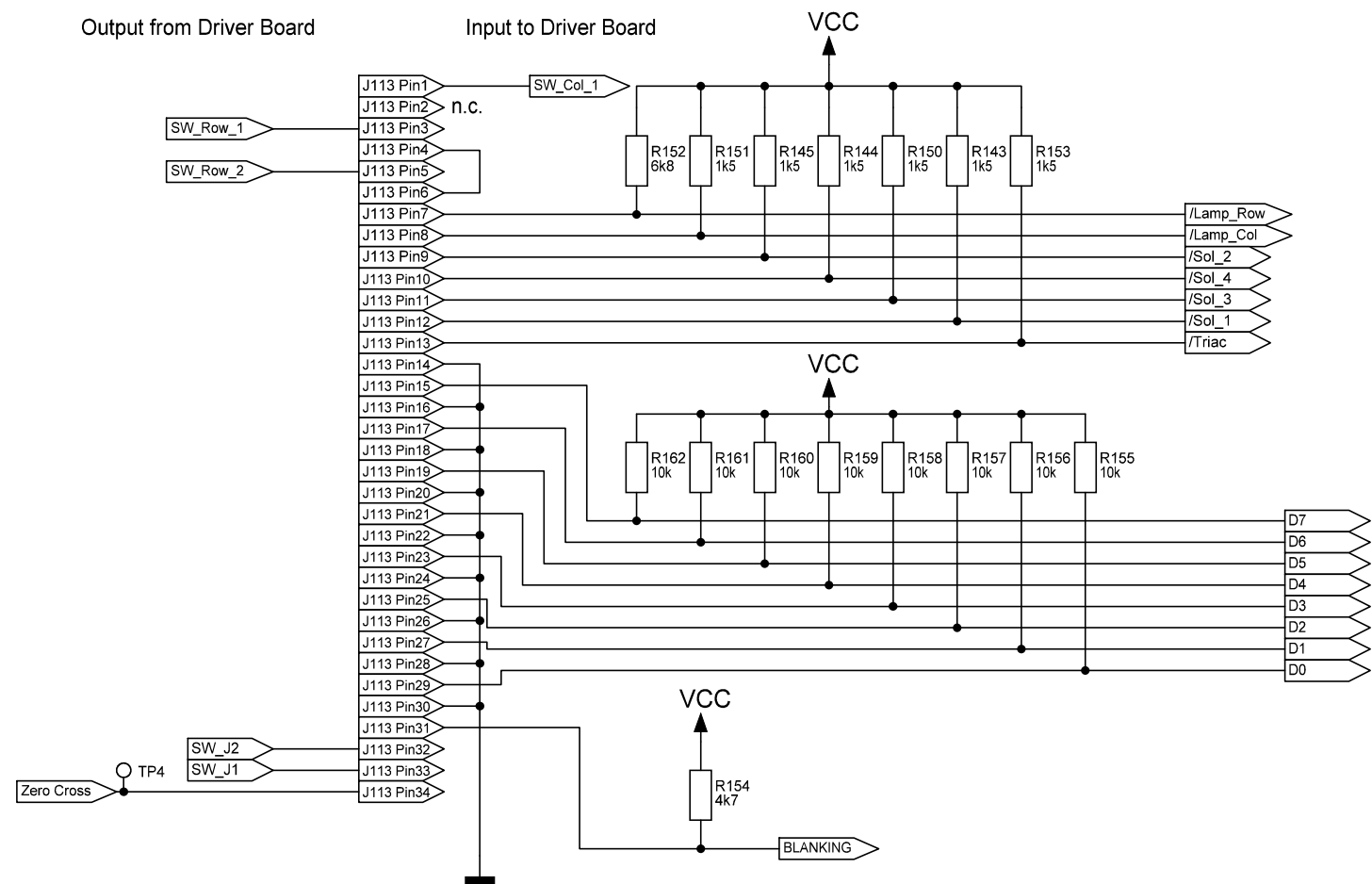
Notes:		
Date: 07/26/05	Lamp Columns PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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Notes:		
Date: 11/10/05	Solenoids 1-16	PN: 2005019
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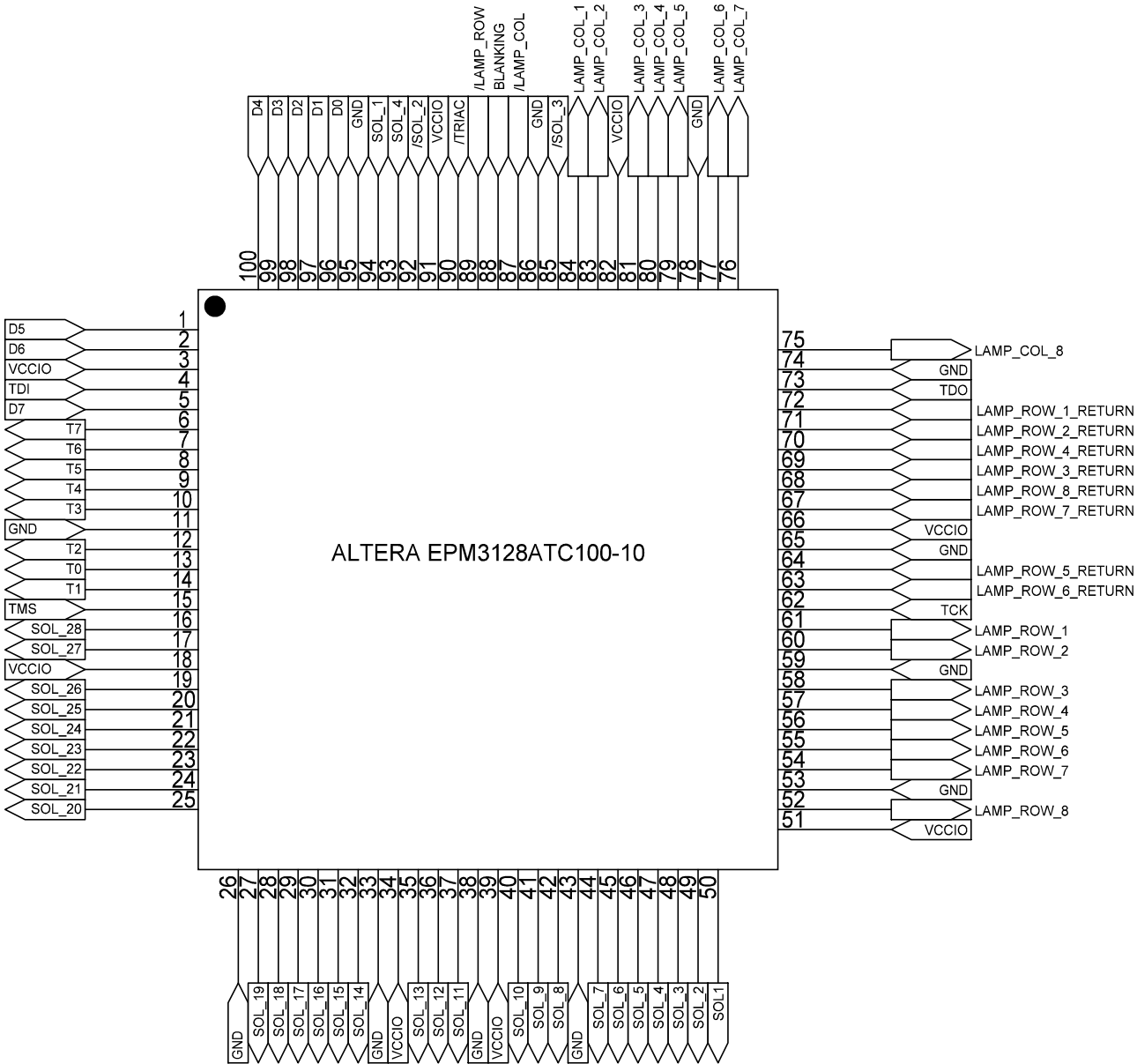
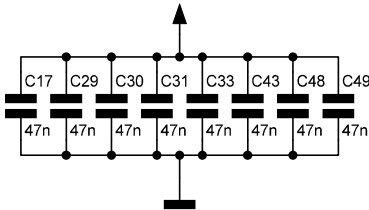
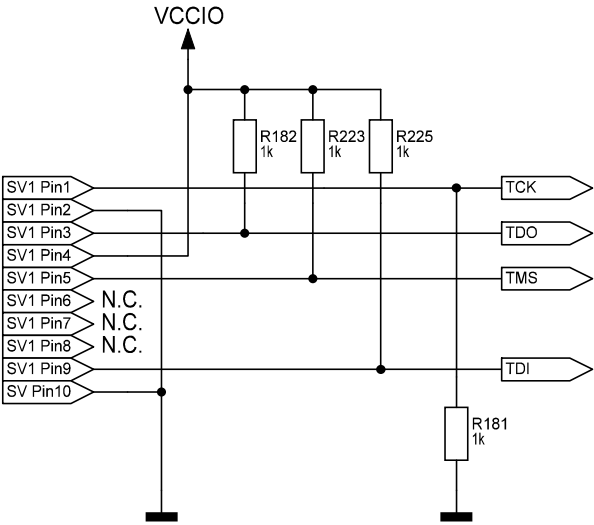


Notes:		
Date: 11/10/05	Solenoids 17-28 PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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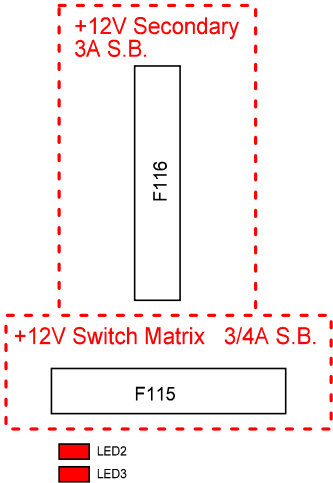


Notes:		
Date: 07/26/05	Digital I/O Ports PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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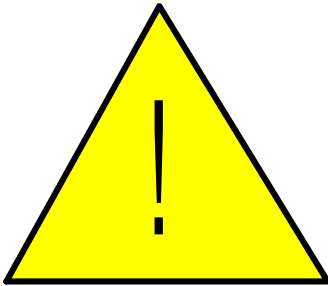
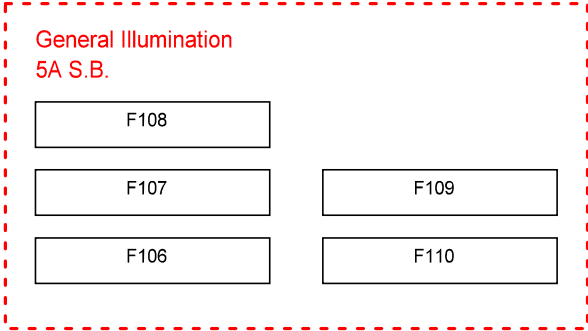
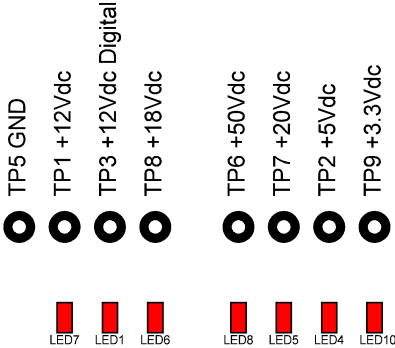
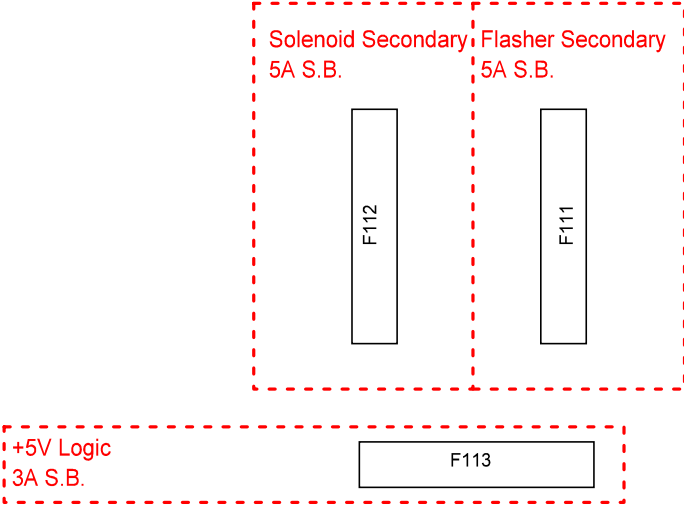
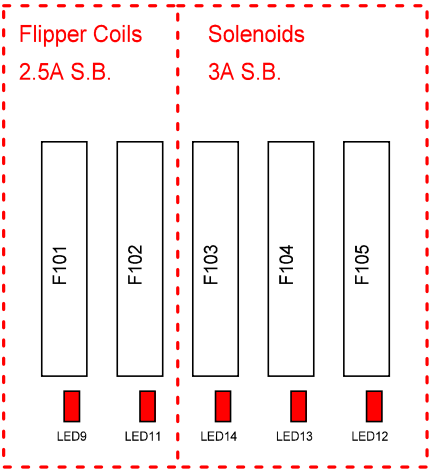
ALTERA Programm Socket



Notes:		
Date: 07/26/05	CPLD Chip PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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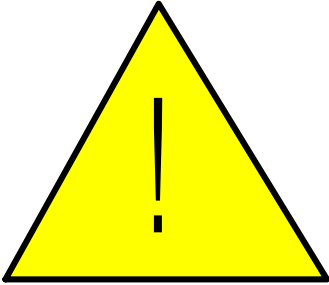


TP4 Zero Cross



CAUTION !

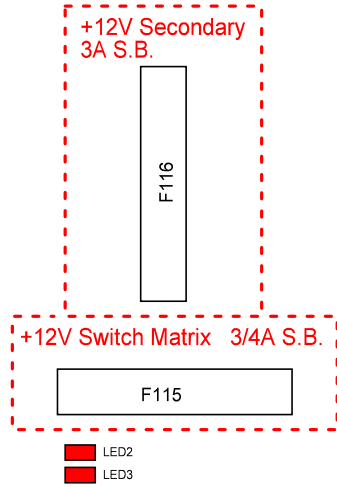
DO NOT OVER FUSE !!!



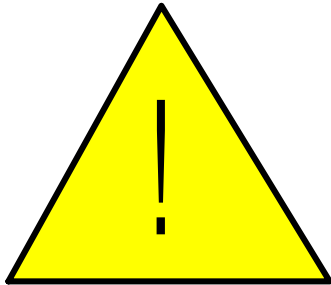
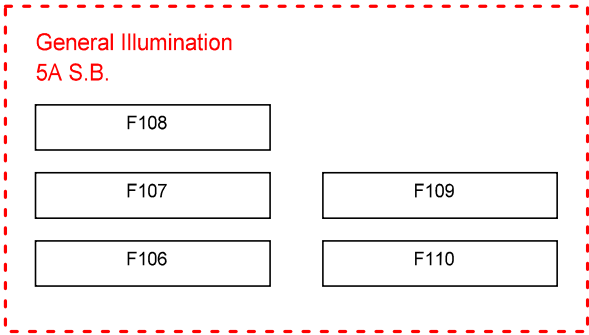
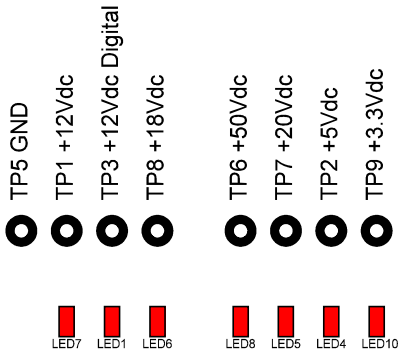
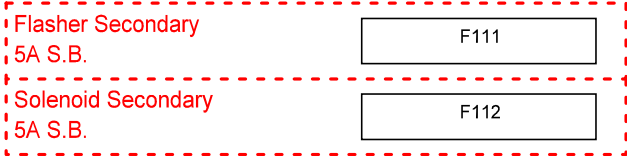
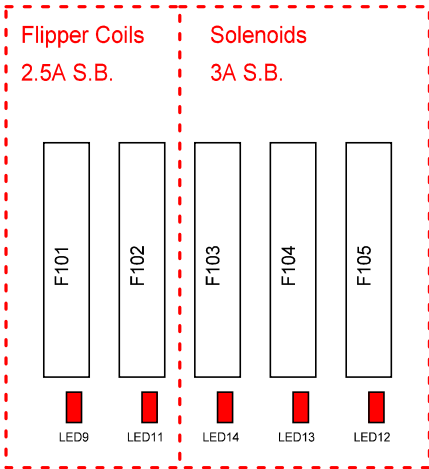
CAUTION !

Revision i

Notes:		
Date: 02/09/06	Fuse Overview PinLED	PN: 2005019
Name: A.Foerster		Rev: I
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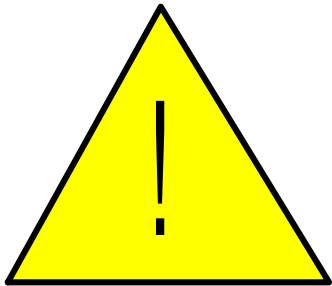


TP4 Zero Cross



CAUTION !

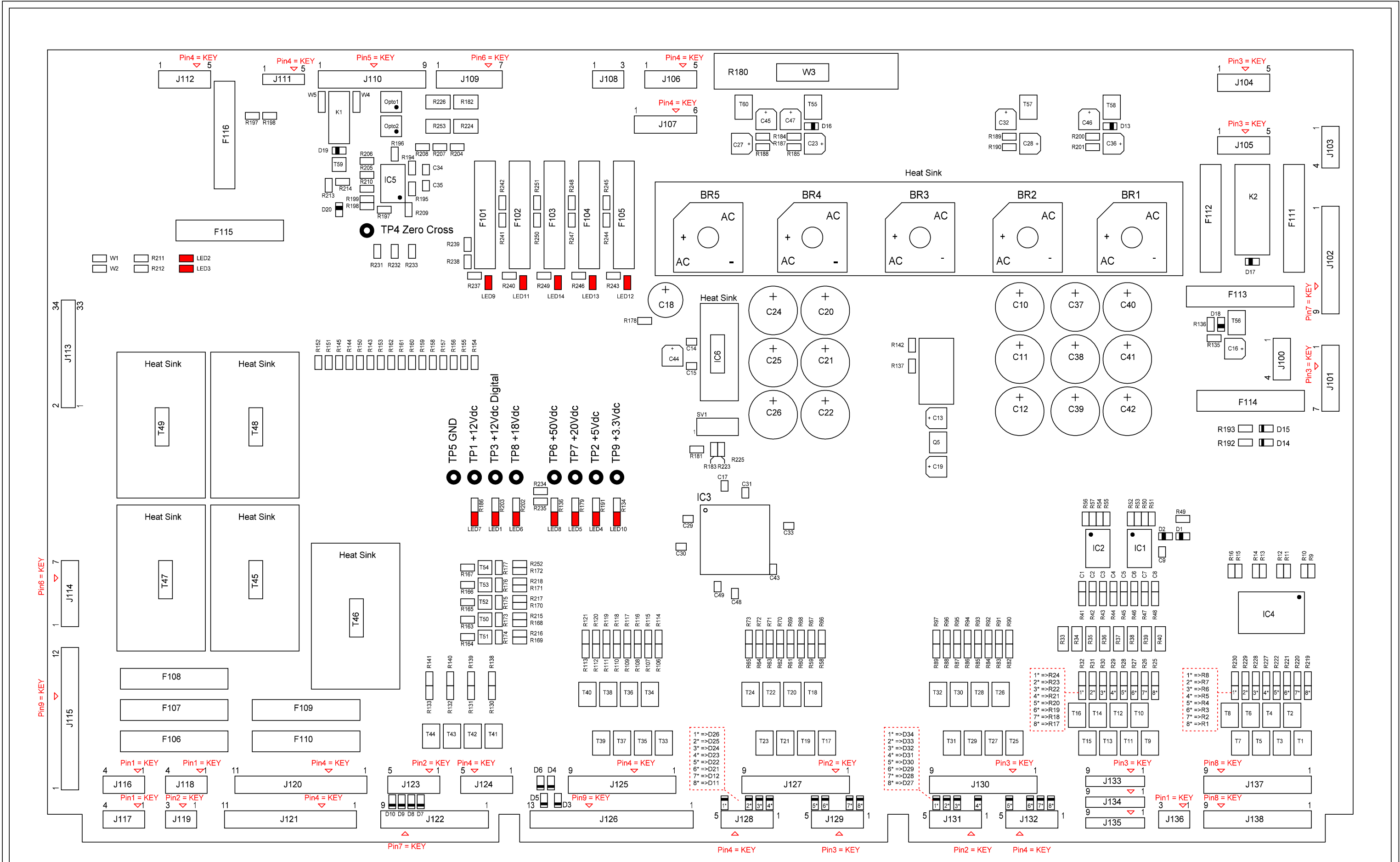
DO NOT OVER FUSE !!!



CAUTION !

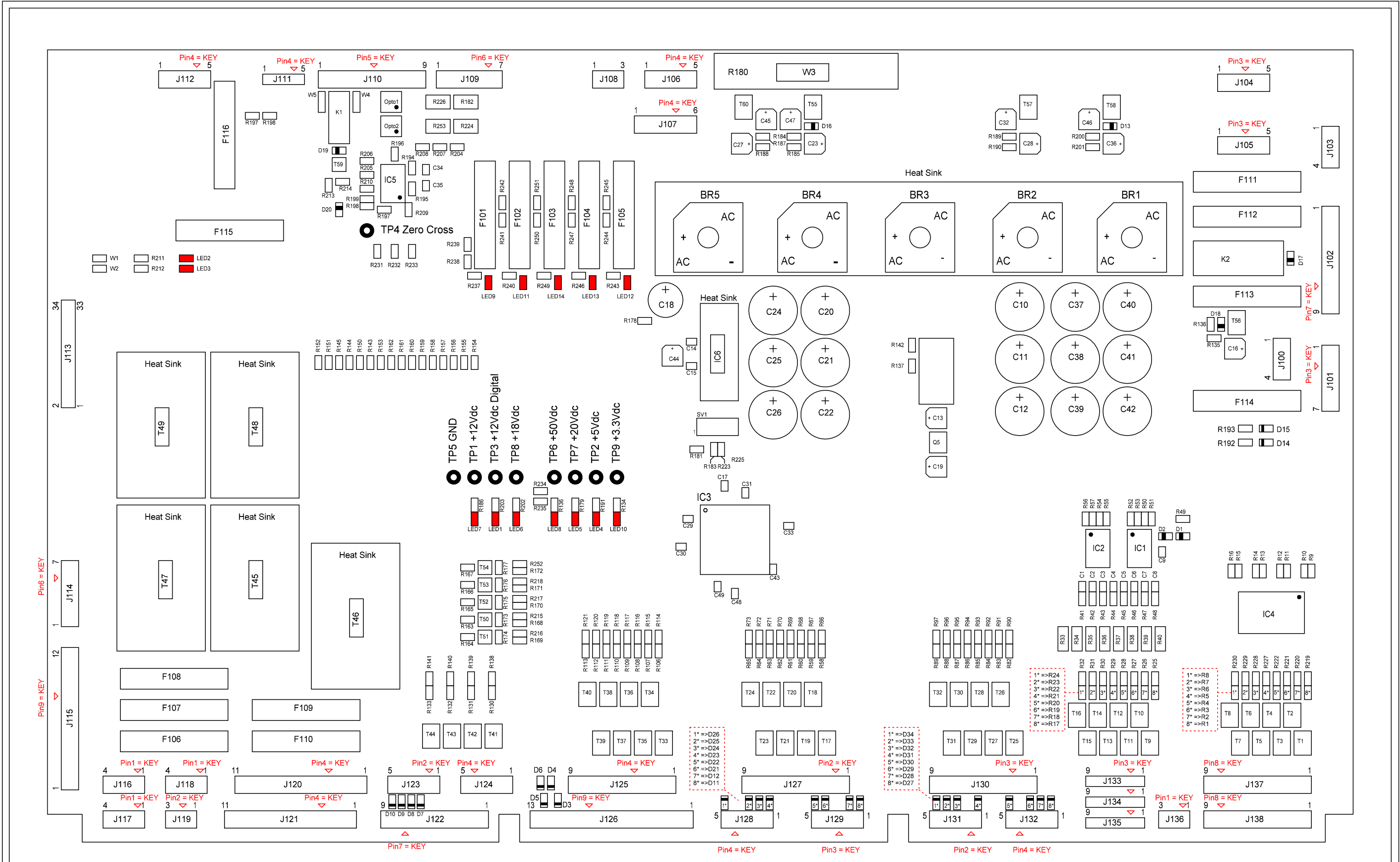
Revision j

Notes:		
Date: 02/09/06	Fuse Overview PinLED	PN: 2005019
Name: A.Foerster		Rev: J
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Revision i

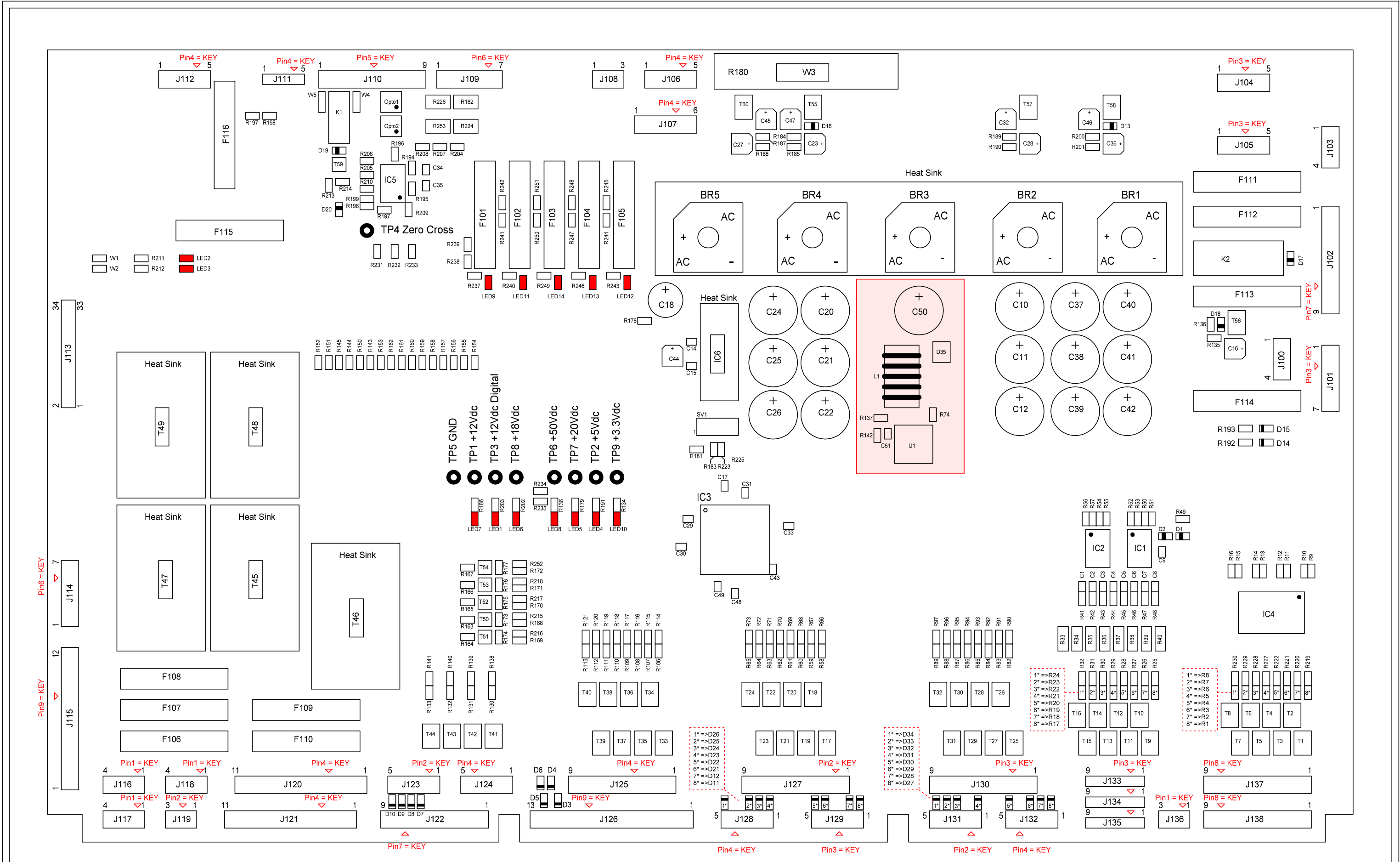
Notes:		
Date: 11/10/05	Parts / Bauteile 	



Revision j

Notes:		Parts / Bauteile	PN: 2005019
Date: 02/05/06	Name: A.Foerster		Rev: J
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PinLED



Revision k

Notes:		Parts / Bauteile	PN: 2005019
Date: 23/10/28	Name: A.Foerster		Rev: K
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PinLED

Parts List / Bauteilliste

BR1, BR2, BR3, BR4, BR5.....	KBPC3504	
C1, C2, C3, C4, C5, C6, C7, C8, C9.....	100nF.....	0805
C10, C11, C12.....	4700µF/25V 105°C Low ESR	
C13.....	10µF/16V.....	SMD
C14, C15.....	100nF.....	0805
C16.....	100µF/25V.....	SMD
C17.....	47nF.....	0805
C18.....	100µF/100V.....	
C19.....	10µF/16V.....	SMD
C20, C21, C22.....	4700µF/25V.....	
C23.....	100µF/25V.....	SMD
C24, C25, C26.....	4700µF/25V.....	
C27, C28.....	100µF/25V.....	SMD
C29, C30, C31.....	47nF.....	0805
C32.....	100µF/25V.....	SMD
C33.....	47nF.....	0805
C34, C35.....	1nF.....	0805
C36.....	100µF/25V.....	SMD
C37, C38, C39, C40, C41, C42.....	4700µF/25V.....	
C43.....	47nF.....	0805
C44, C45, C46, C47.....	100µF/25V.....	SMD
C48, C49.....	47nF.....	0805
C50.....	4700µF/25V.....	
C51.....	100nF.....	0805
D1, D2.....	1N4148.....	SOD80C
D3, D4, D5, D6, D7, D8, D9, D10, D11, D12.....	1N4004.....	SOD106W
D13.....	10V.....	SOD80C
D14, D15.....	1N4004.....	SOD106W
D16.....	10V.....	SOD80C
D17.....	1N4004.....	SOD106W
D18.....	1N4148.....	SOD80C
D19.....	1N4004.....	SOD106W
D20.....	10V.....	SOD80C
D21, D22, D23, D24, D25, D26, D27, D28, D29.....	1N4004.....	SOD106W
D30, D31, D32, D33, D34.....	1N4004.....	SOD106W
D35.....	UPS540E3.....	
F101, F102.....	2.5A, S.B.....	6x32/5x20mm
F103, F104, F105.....	3A, S.B.....	6x32/5x20mm
F106, F107, F108, F109, F110, F111, F112.....	5A, S.B.....	6x32/5x20mm
F113.....	3A, S.B.....	6x32/5x20mm
F114.....	8A, N.B.....	6x32/5x20mm
F115.....	3/4A, S.B.....	6x32/5x20mm
F116.....	3A, S.B.....	6x32/5x20mm
IC1, IC2.....	LM339D.....	SO14
IC3.....	EPM3128ATC100-10.....	FPGA100
IC4.....	ULN2803A.....	SO18
IC5.....	LM339D.....	SO14
IC6.....	LM2940CT12.....	TO220
J100.....	MLSS156-4.....	3.96mm
J101.....	MLSS156-7.....	3.96mm
J102.....	MLSS156-9.....	3.96mm
J103.....	MLSS156-4.....	3.96mm
J104, J105, J106.....	MLSS156-5.....	3.96mm
J107.....	MLSS156-6.....	3.96mm
J108.....	MLSS156-3.....	3.96mm
J109.....	MLSS156-7.....	3.96mm
J110.....	MLSS156-9.....	3.96mm
J111.....	MLSS100-15 (div.3)2.54mm	
J112.....	MLSS156-5.....	3.96mm
J113.....	2x17 pol male.....	2.54mm
J114.....	MLSS156-7.....	3.96mm
J115.....	MLSS156-12.....	3.96mm

J116, J117, J118.....	MLSS156-4.....	3.96mm
J119.....	MLSS156-3.....	3.96mm
J120, J121.....	MLSS156-11.....	3.96mm
J122.....	MLSS156-9.....	3.96mm
J123, J124.....	MLSS156-5.....	3.96mm
J125.....	MLSS156-9.....	3.96mm
J126.....	MLSS156-13.....	3.96mm
J127.....	MLSS156-9.....	3.96mm
J128, J129.....	MLSS156-5.....	3.96mm
J130.....	MLSS156-9.....	3.96mm
J131, J132.....	MLSS156-5.....	3.96mm
J133, J134, J135.....	MLSS100-18 (Div.2)2.54mm	
J136.....	MLSS156-3.....	3.96mm
J137, J138.....	MLSS156-9.....	3.96mm
K1, K2.....	Finder Relais 40.52.9....	12V
LED1 to LED14.....	Red 20mA.....	1206
L1.....	100µH/5A.....	
Opto1, Opto2.....	SFH6106.....	
Q5.....	LM2937-3.3.....	SOT223
R1, R2, R3, R4, R5, R6, R7, R8.....	22k.....	1206
R9, R10, R11, R12, R13, R14, R15, R16.....	2k2.....	1206
R17, R18, R19, R20, R21, R22, R23, R24.....	22k.....	1206
R25, R26, R27, R28, R29, R30, R31, R32.....	2k2.....	1206
R33, R34, R35, R36, R37, R38, R39, R40.....	0R22 /1W.....	2512
R41, R42, R43, R44, R45, R46, R47, R48.....	2k2.....	1206
R49.....	1k.....	1206
R50, R51, R52, R53, R54, R55, R56, R57.....	10k.....	1206
R58, R59, R60, R61, R62, R63, R64, R65.....	22k.....	1206
R66, R67, R68, R69, R70, R71, R72, R73.....	2k2.....	1206
R74.....	270k.....	1206
R82, R83, R84, R85, R86, R87, R88, R89.....	22k.....	1206
R90, R91, R92, R93, R94, R95, R96, R97.....	2k2.....	1206
R106, R107, R108, R109, R110, R111, R112, R113.....	22k.....	1206
R114, R115, R116, R117, R118, R119, R120, R121.....	2k2.....	1206
R130, R131, R132, R133.....	22k.....	1206
R134.....	180R.....	1206
R135.....	2k2.....	1206
R136.....	100k.....	1206
R137.....	6k8.....	1206
R138, R139, R140, R141.....	2k2.....	1206
R142.....	68k.....	1206
R143, R144, R145.....	1k5.....	1206
R150, R151.....	1k5.....	1206
R152.....	6k8.....	1206
R153.....	1k5.....	1206
R154.....	4k7.....	1206
R155, R156, R157, R158, R159, R160, R161, R162.....	10k.....	1206
R163, R164, R165, R166, R167.....	51R.....	1206
R168, R169, R170, R171, R172.....	560R.....	1206
R173, R174, R175, R176, R177, R178.....	10k.....	1206
R179.....	1k5.....	1206
R180.....	0R12 /11W.....	KH216-8
R181.....	1k.....	1206
R182.....	1k8.....	2512
R183, R184.....	1k.....	1206

R185.....	3k9.....	1206
R186, R187.....	1k.....	1206
R188.....	3k9.....	1206
R189.....	1k.....	1206
R190.....	3k9.....	1206
R191, R192, R193, R194, R195.....	270R.....	1206
R196.....	1k.....	1206
R197.....	27k.....	1206
R198, R199.....	10k.....	1206
R200.....	1k.....	1206
R201.....	3k9.....	1206
R202.....	1k5.....	1206
R203.....	1k.....	1206
R204.....	2k7.....	1206
R205.....	10k.....	1206
R206.....	not mounted	
R207.....	270R.....	1206
R208.....	1k.....	1206
R209, R210.....	10k.....	1206
R211, R212.....	270R.....	1206
R213.....	390R.....	1206
R214.....	150R.....	1206
R215, R216, R217, R218, R219, R220, R221, R222.....	2k2.....	1206
R223.....	1k.....	1206
R224.....	1k8.....	2512
R225.....	1k.....	1206
R226.....	1k8.....	2512
R227, R228, R229, R230, R231, R232, R233, R234.....	2k2.....	1206
R235, R236, R237, R238, R239, R240, R241, R242.....	2k2.....	1206
R243, R244, R245, R246, R247, R248, R249, R250.....	2k2.....	1206
R251, R252.....	2k2.....	1206
R253.....	1k8.....	2512

SV1.....2x10 pol male.....2,54mm

T1, T2, T3, T4, T5, T6, T7, T8.....	NTD25P03L.....	DPAK
T9, T10, T11, T12, T13, T14, T15, T16.....	NTD20N03L.....	DPAK
T17, T18, T19, T20, T21, T22, T23, T24.....	STD25NF10L.....	DPAK
T25, T26, T27, T28, T29, T30, T31, T32.....	STD25NF10L.....	DPAK
T33, T34, T35, T36, T37, T38, T39, T40.....	STD25NF10L.....	DPAK
T41, T42, T43, T44.....	STD25NF10L.....	DPAK
T45, T46, T47, T48, T49.....	BT138/600.....	TO220
T50, T51, T52, T53, T54.....	BC807.....	SOT23
T55, T56, T57, T58.....	NTD25P03L.....	DPAK
T59.....	BC807.....	SOT23
T60.....	NTD25P03L.....	DPAK

TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9.....Testpoints

U1.....MC34167D2T.....D2PAC

W1,W2.....0R.....1206
W3, W4, W5.....0R Jumper.....wire

Notes:		
Date: 11/10/05	Parts / Bauteile	PN: 2005019
Name: A.Foerster		Rev: J
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PinLED