

Raytheon

Raytheon Marine Company

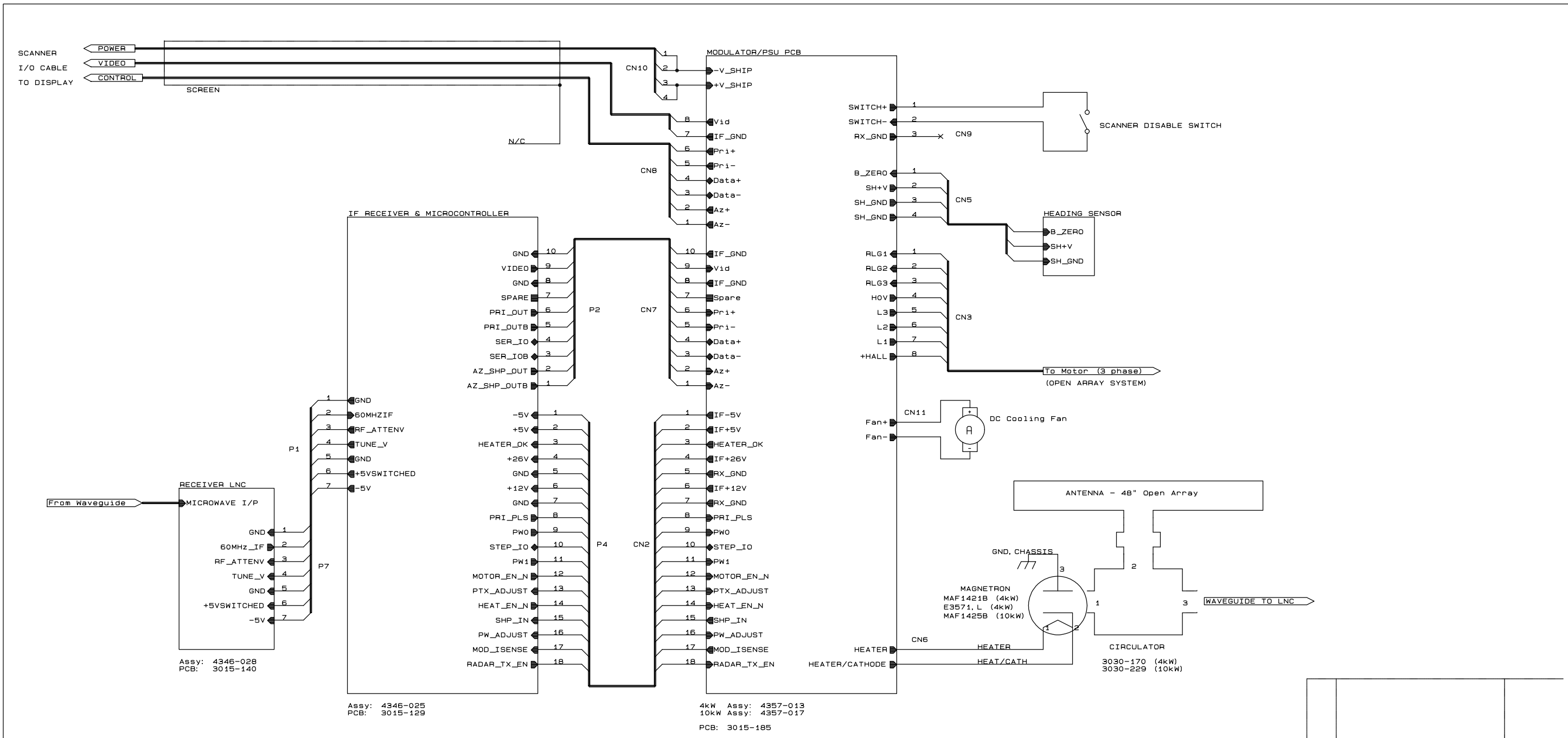
Raytheon Pathfinder Series Radar

ASLMTX5

Circuit Diagrams

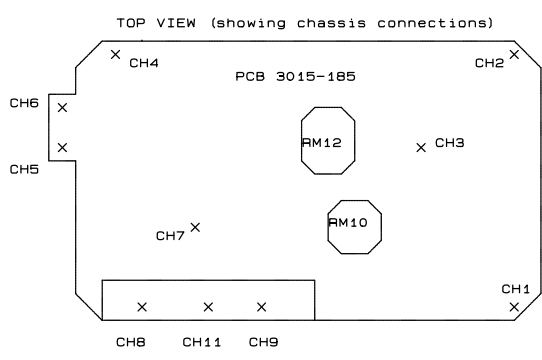
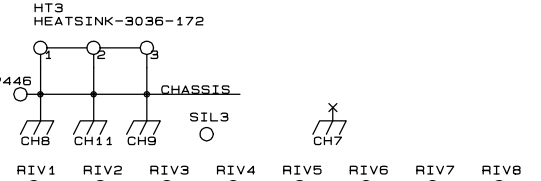
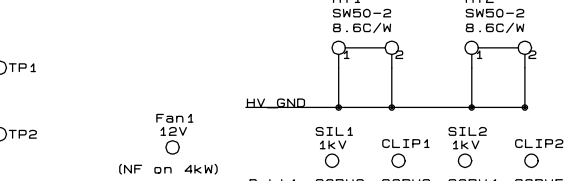
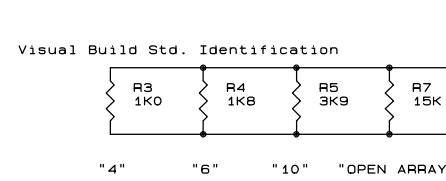
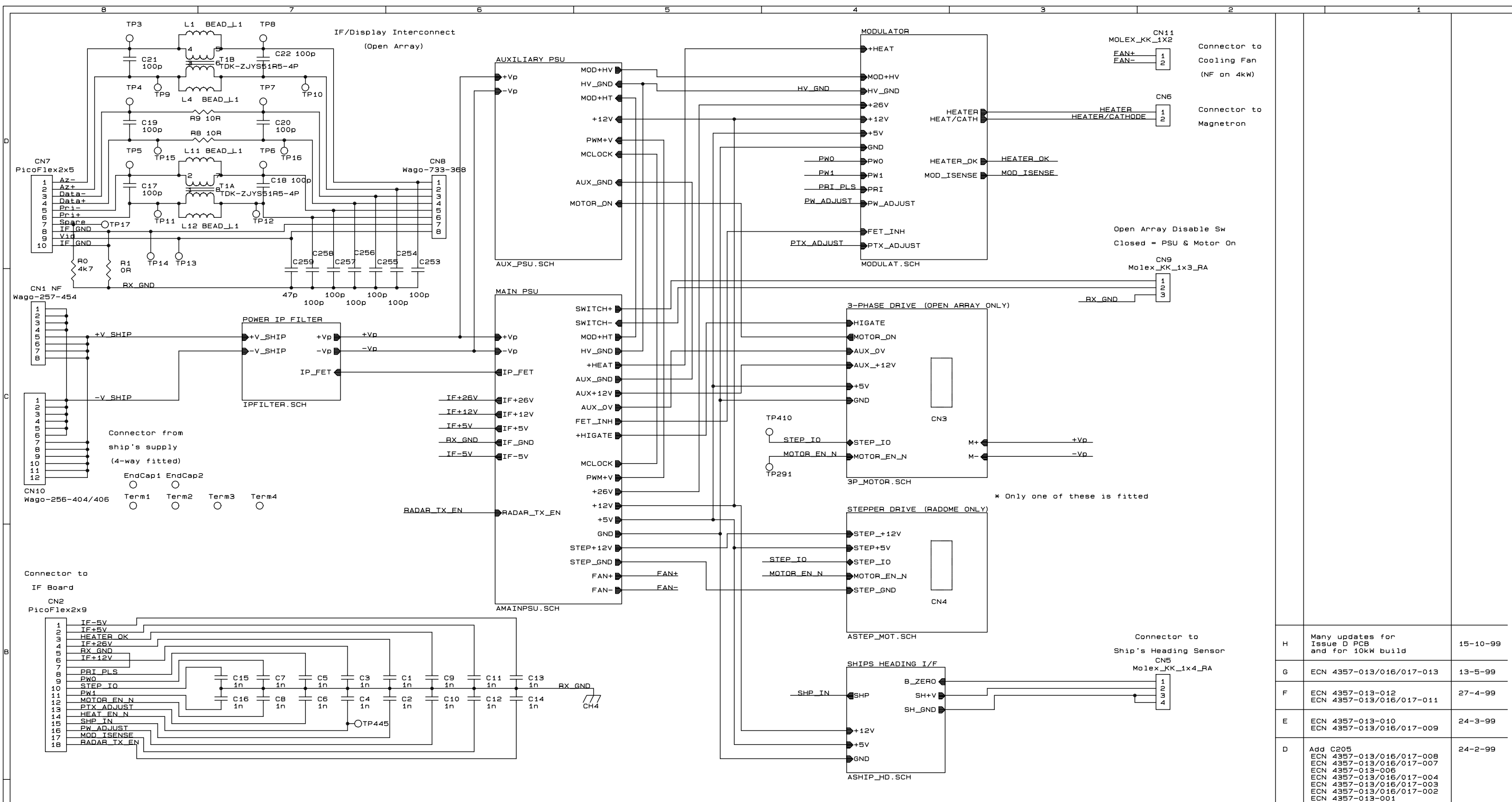
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TOP-LEVEL OPEN ARRAY SCANNER INTERCONNECT

ISS	Description of Change	Date
B	Update for 10kW Open Array	8-12-99
A	Original Issue	12-5-99



Orcad Schematic / Part Field Allocation :

- #1 Footprint
- #2 Build Option (4A, 6A, 10A, ALL, NF)
- #3 Tolerance/Rating
- #4 not used
- #5 not used
- #6 4kW Open Array Build Option p/n
- #7 6kW Open Array Build Option p/n
- #8 10kW Open Array Build Option p/n

Note:
Some part values change with build type
these are written as 4kW/6kW/10kW

TH_DATUM	TH_TH2	LABEL1	LABEL2
X	X	X	X
DATUM	TH2	FID1	FID2
X	X	X	X

DATUM	TH2	FID1	FID2	FID3
X	X	X	X	X

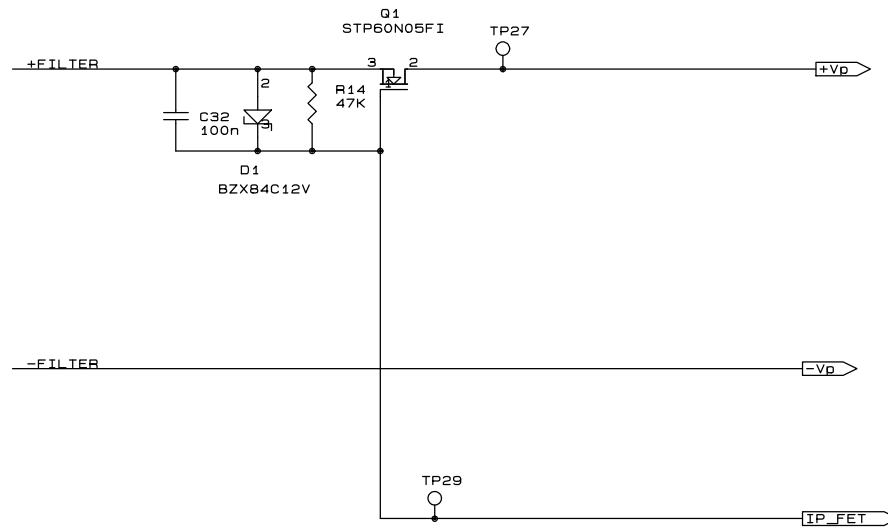
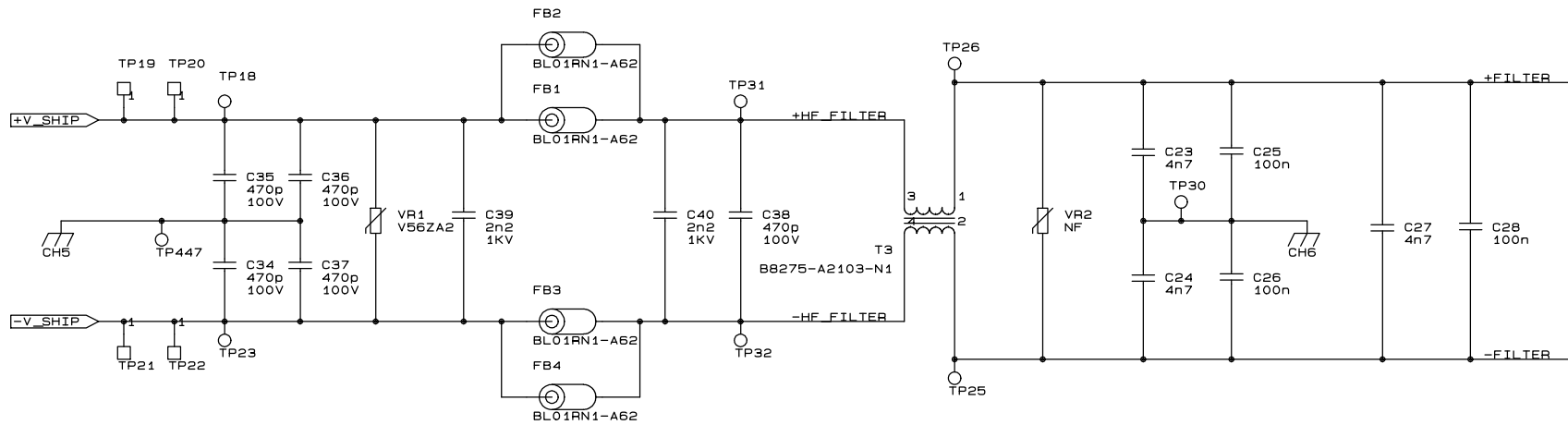
Revision	Description of change	Date
H	Many updates for Issue D PCB and for 10kW build	15-10-99
G	ECN 4357-013/016/017-013	13-5-99
F	ECN 4357-013-012 ECN 4357-013/016/017-011	27-4-99
E	ECN 4357-013-010 ECN 4357-013/016/017-009	24-3-99
D	Add C205 ECN 4357-013/016/017-008 ECN 4357-013/016/017-007 ECN 4357-013-006 ECN 4357-013/016/017-004 ECN 4357-013/016/017-003 ECN 4357-013/016/017-002 ECN 4357-013-001	24-2-99
C	Minor BOM corrections	25-1-99
B10	As for PCB Iss C	13-1-99
A12	Initial PCB Rev. B	07-9-98
Ax	Initial Draft's	01-9-98
ISS	Description of change	Date

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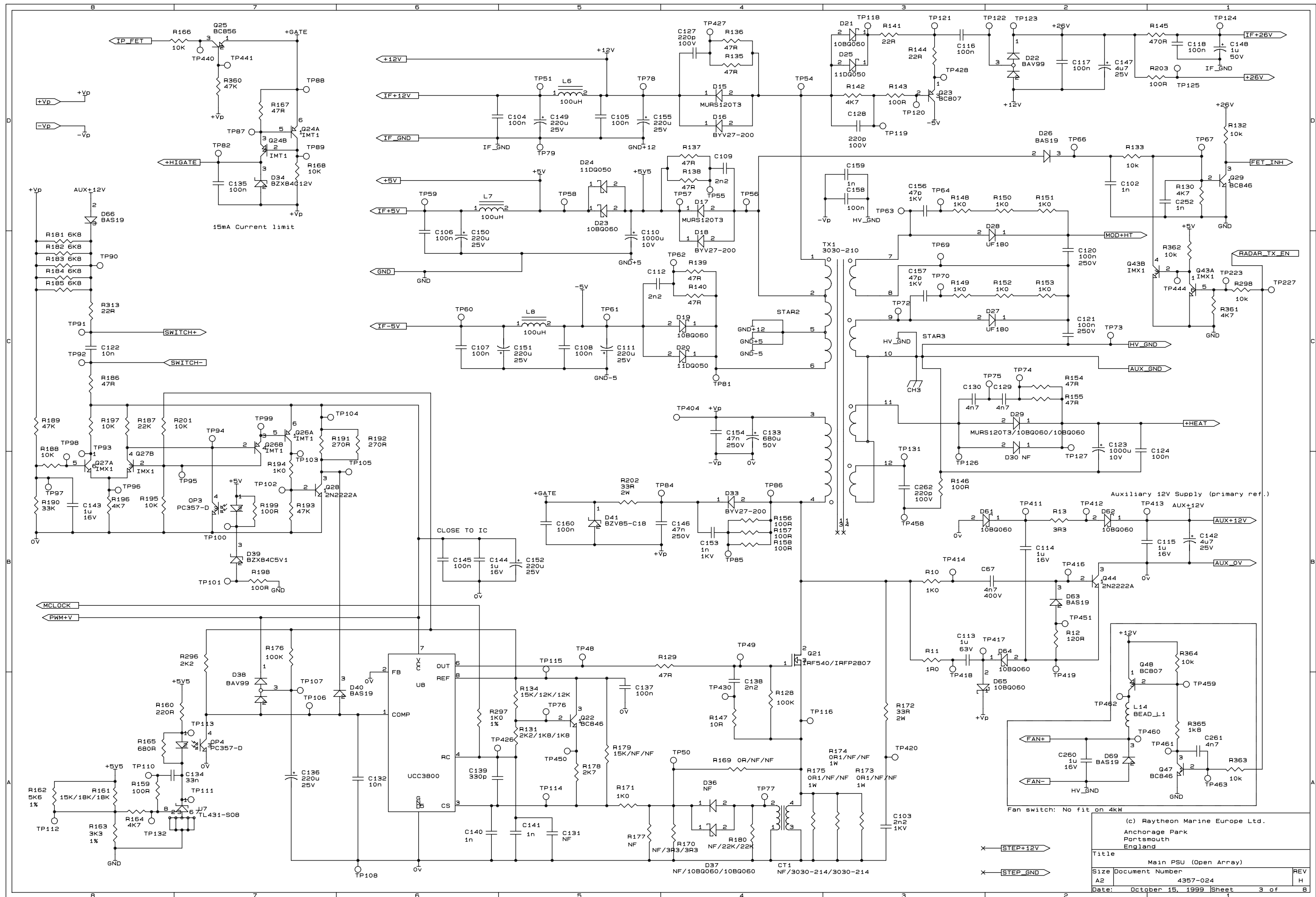
Title
Pathfinder Radar : Modulator/PSU (MkII)

Size Document Number
A2 4357-024

Date: October 22, 1999 Sheet 1 of 8



(c) Raytheon Marine Europe Ltd. Anchorage Park Portsmouth England		
Title POWER I/P FILTER		
Size A3	Document Number 4357-024	REV H
Date: October 1, 1999	Sheet 2 of	8

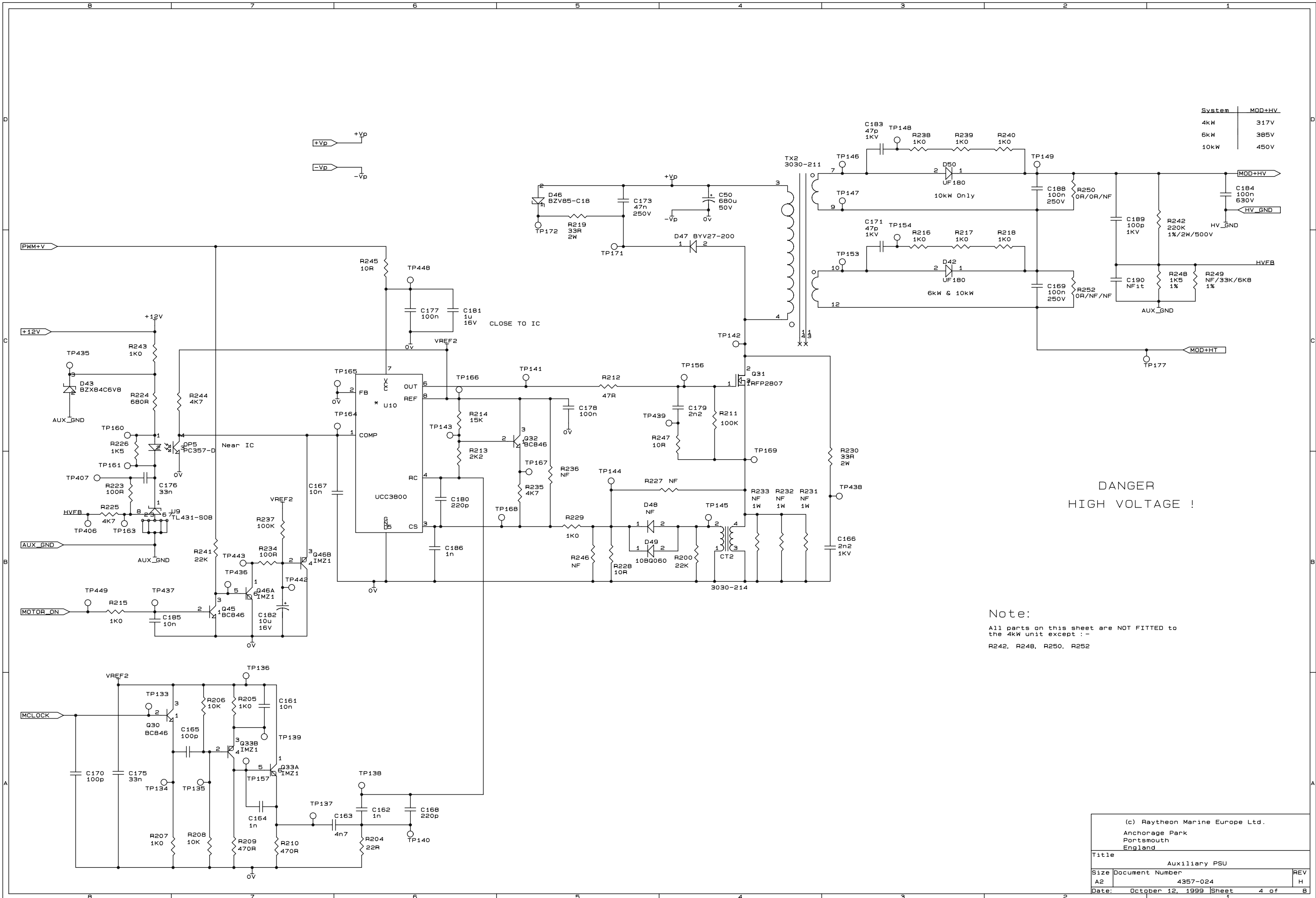


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Title: Main PSU (Open Array)

Size	Document Number	REV
A2	4357-024	H

Date: October 15, 1999 Sheet 3 of 8



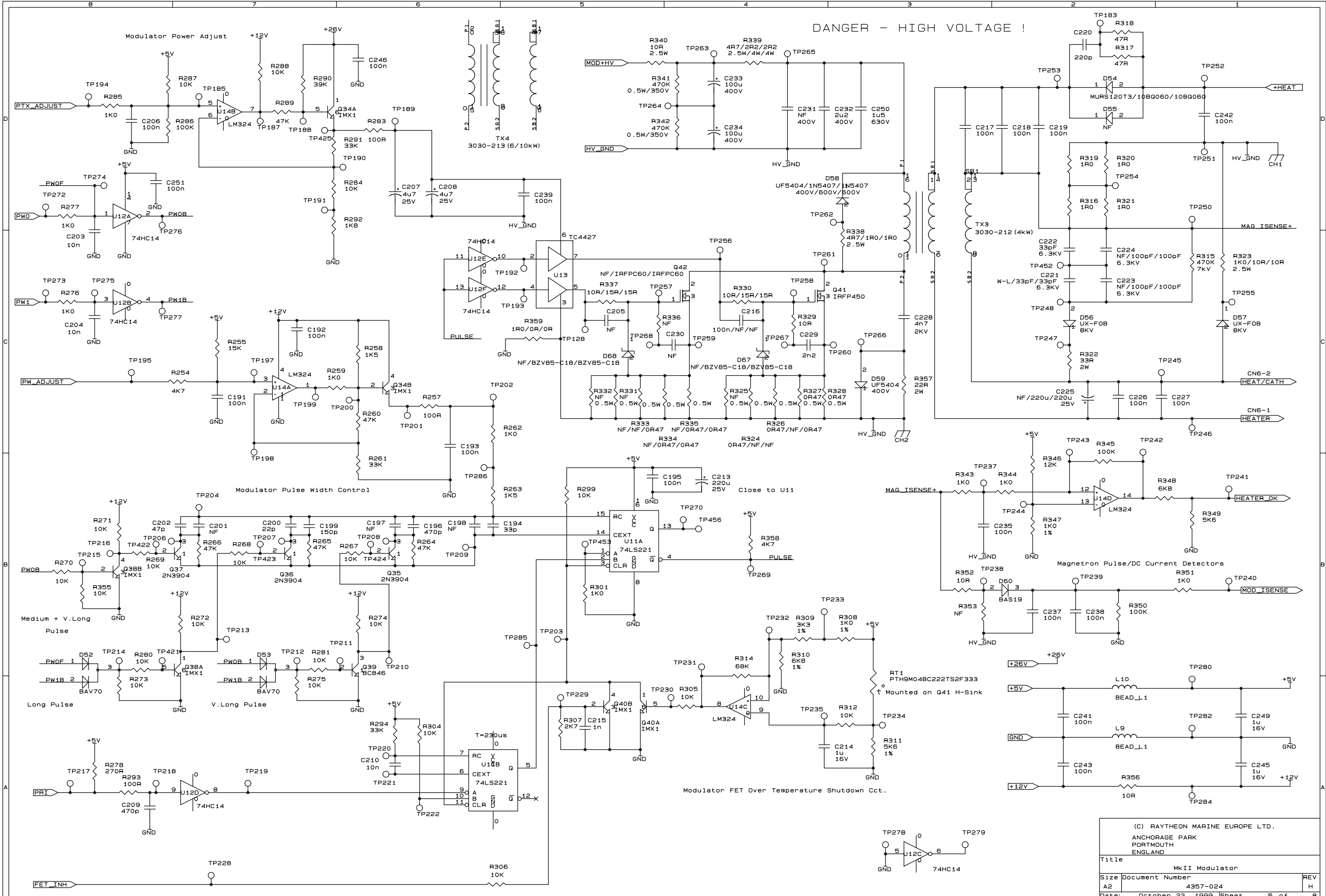
System	MOD+HV
4kW	317V
6kW	385V
10kW	450V

**DANGER
HIGH VOLTAGE !**

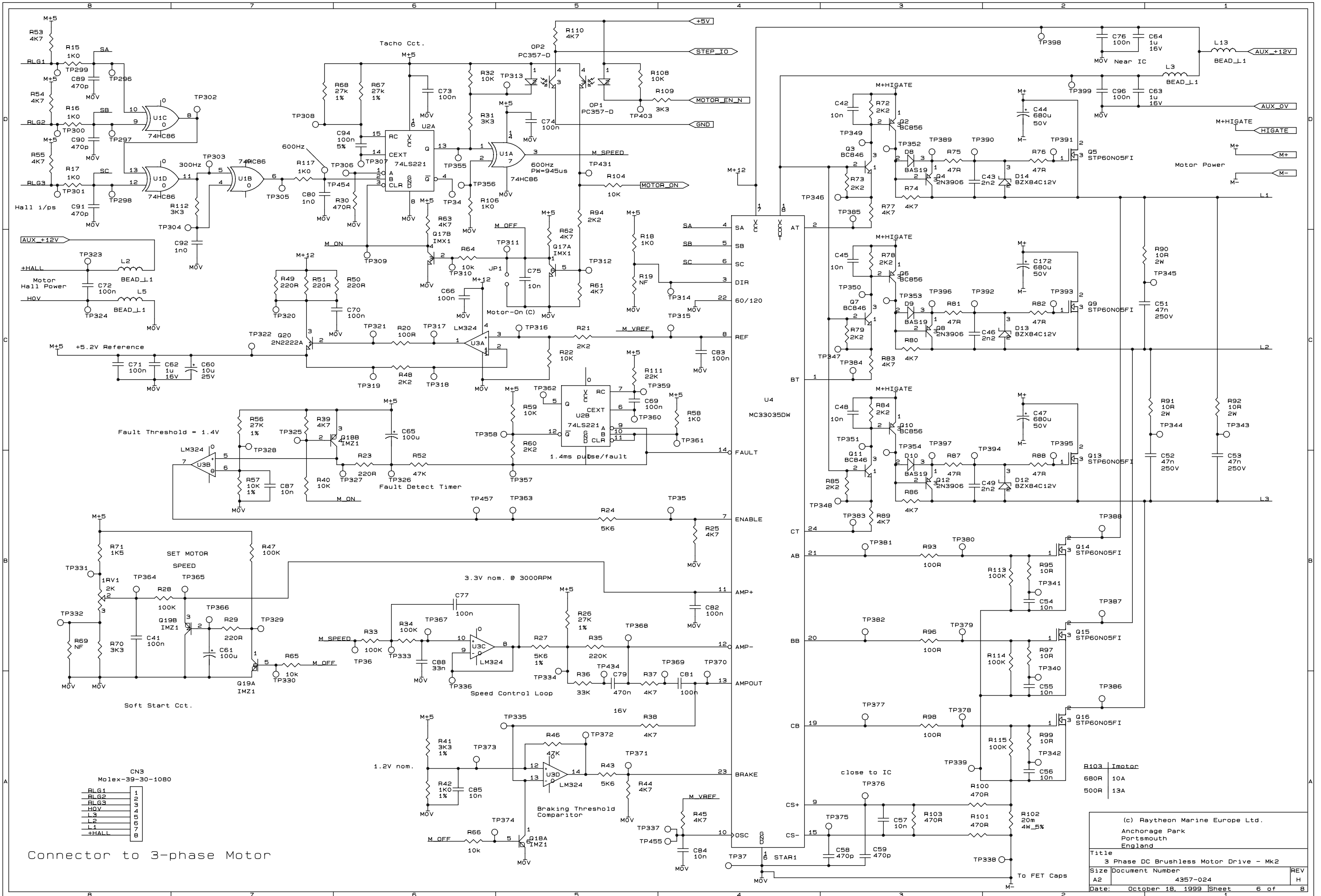
Note:
All parts on this sheet are NOT FITTED to the 4kW unit except :-
R242, R248, R250, R252

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Title	Auxiliary PSU	
Size	Document Number	REV
A2	4357-024	H
Date:	October 12, 1999	Sheet 4 of 8

DANGER - HIGH VOLTAGE !

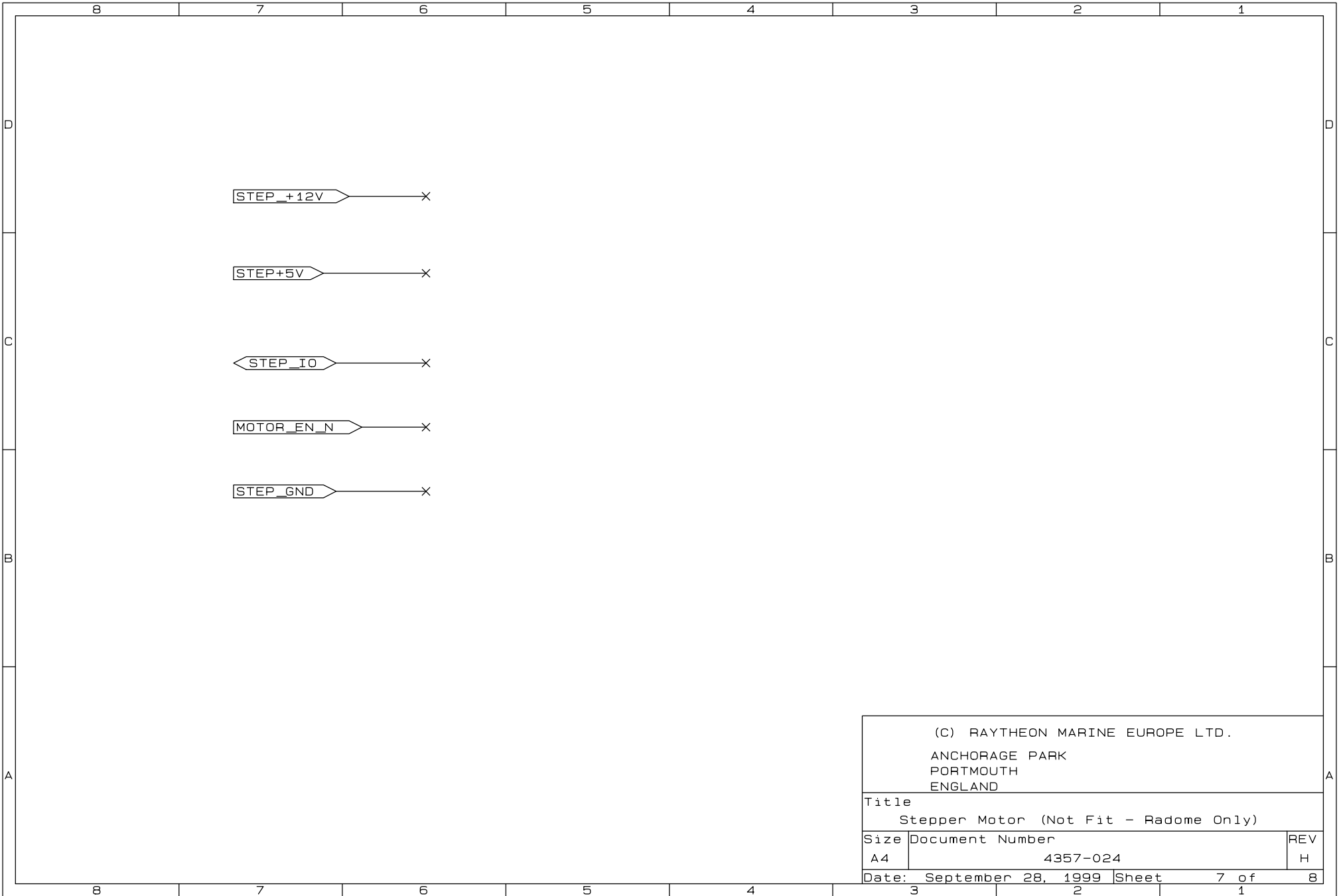


(C) RAYTHEON MARINE EUROPE LTD. ANCHORAGE PARK PORTMOUTH ENGLAND		
Title	MkII Modulator	
Size	Document Number	REV
A2	4357-024	H
Date:	October 22, 1999	Sheet 5 of 8



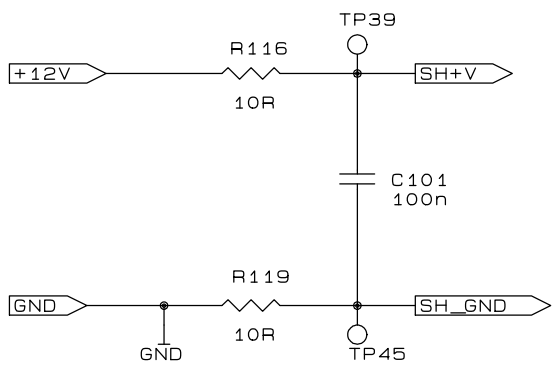
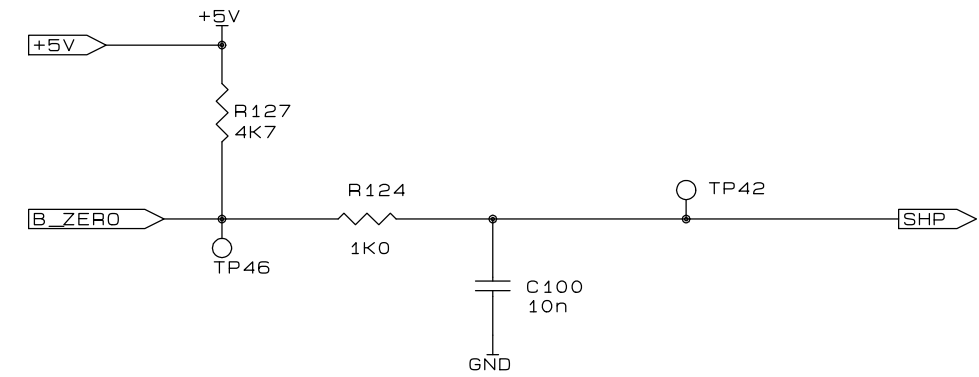
Connector to 3-phase Motor

R103 Motor
 680R 10A
 500R 13A



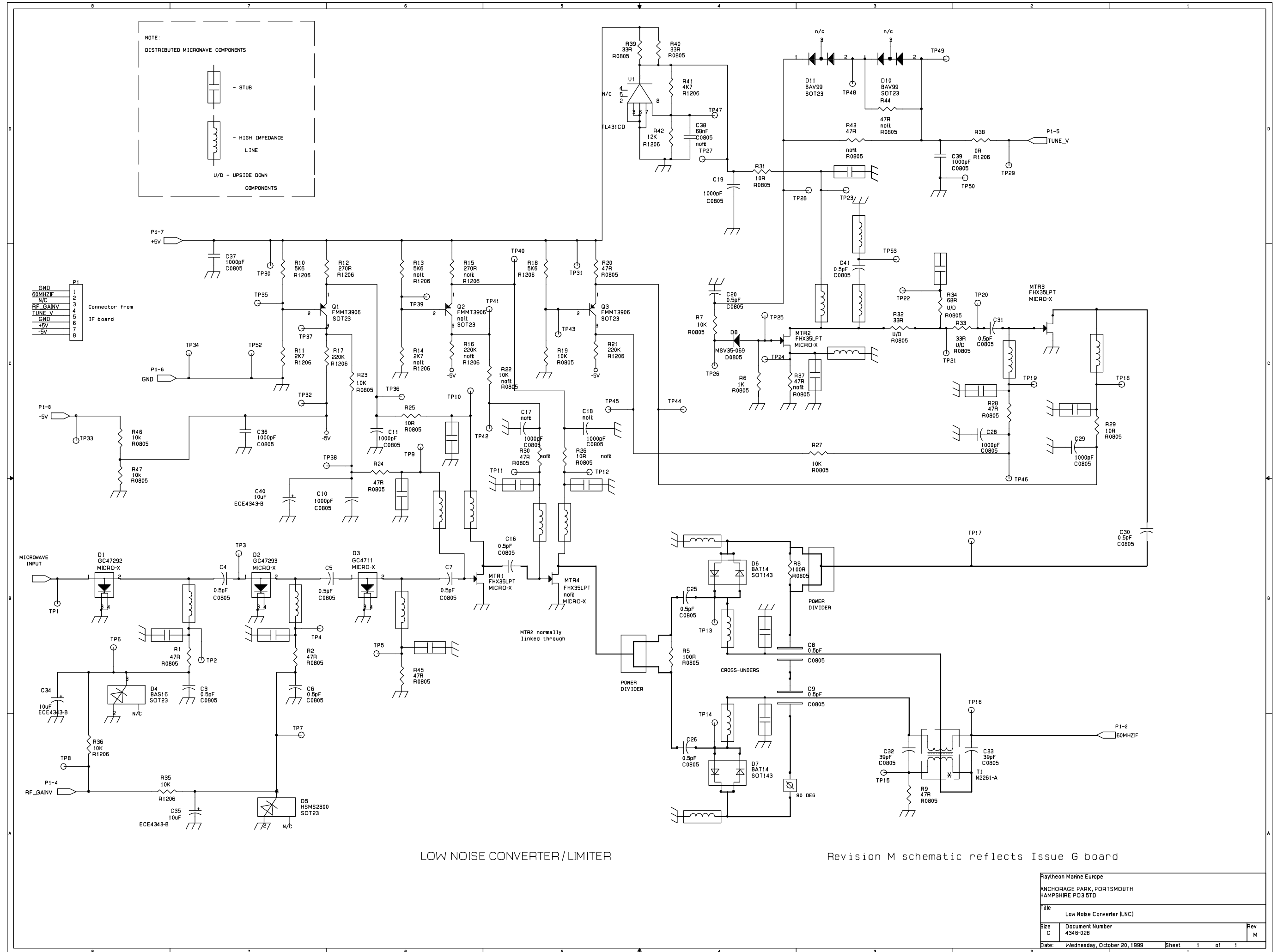
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Title			
Stepper Motor (Not Fit - Radome Only)			
Size	Document Number		REV
A4	4357-024		H
Date:	September 28, 1999	Sheet	7 of 8
	3	2	1



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Title		
Ships Heading Interface (Open Array)		
Size	Document Number	REV
A4	4357-024	H
Date:	September 28, 1999	Sheet 8 of 8



NOTE:
 DISTRIBUTED MICROWAVE COMPONENTS

- STUB

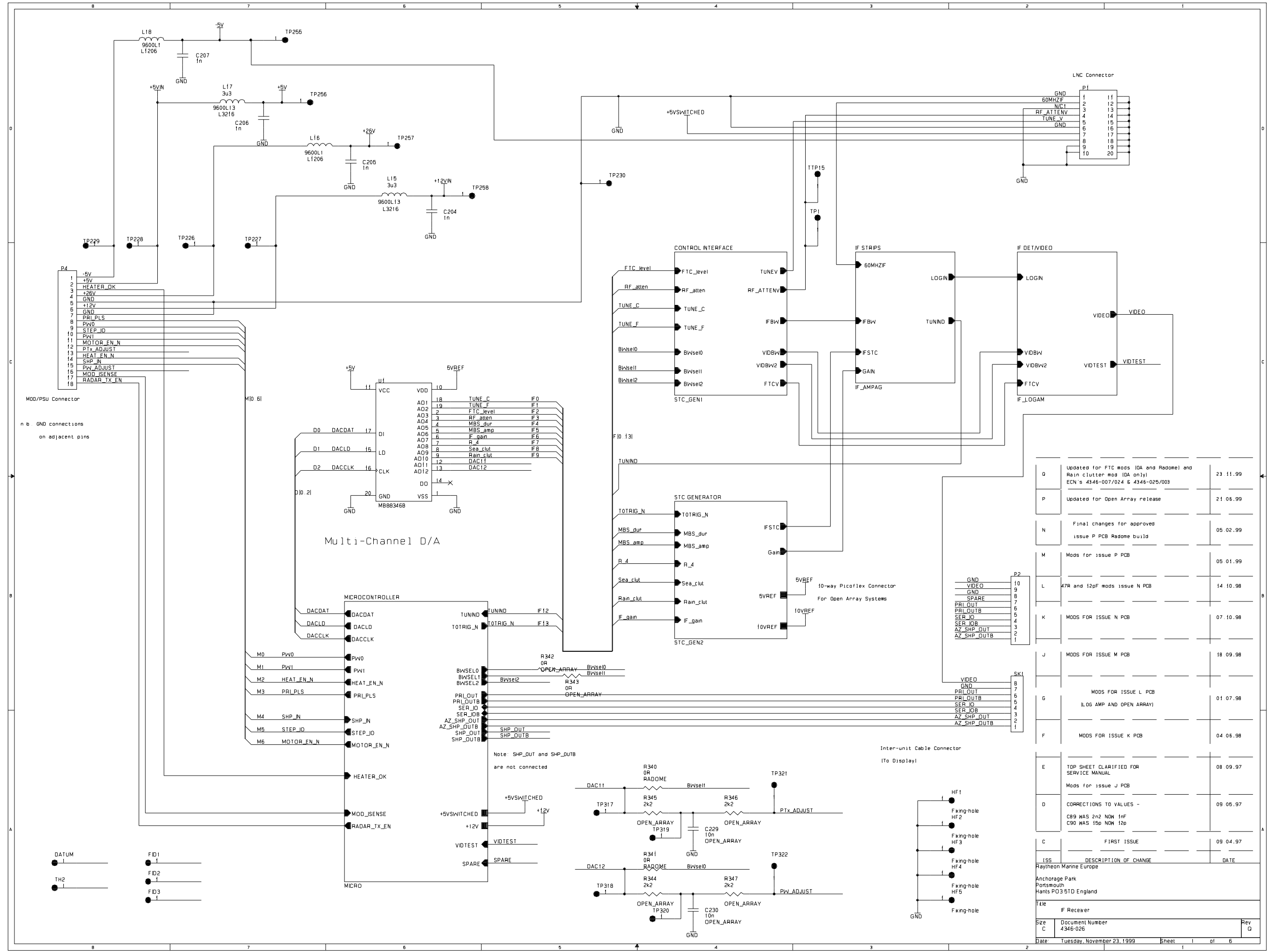
- HIGH IMPEDANCE LINE

U/D - UPSIDE DOWN COMPONENTS

LOW NOISE CONVERTER/LIMITER

Revision M schematic reflects Issue G board

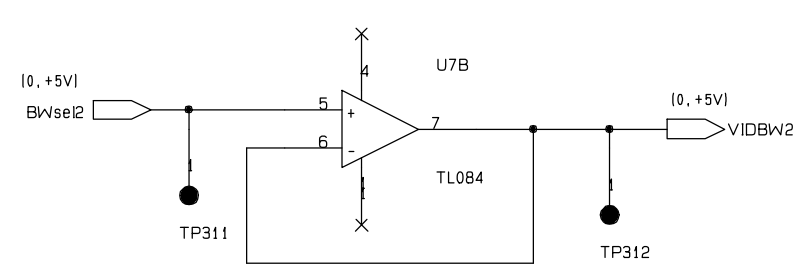
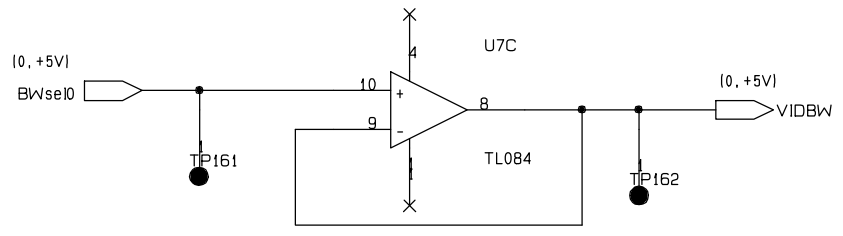
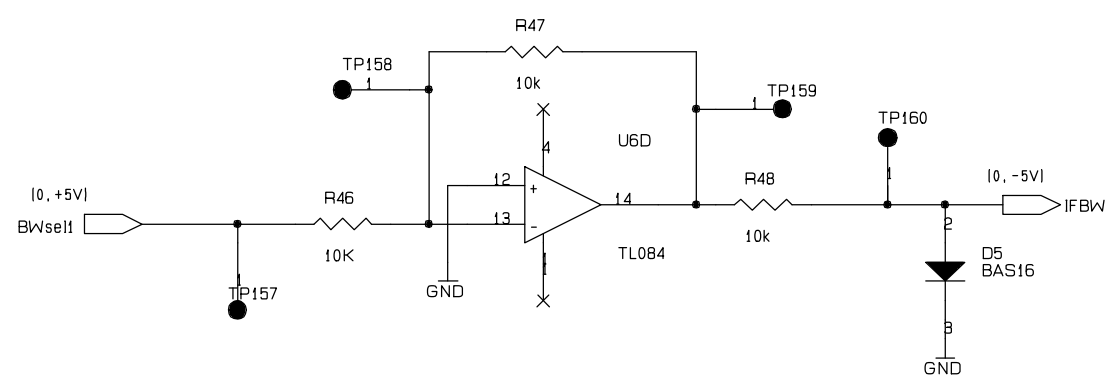
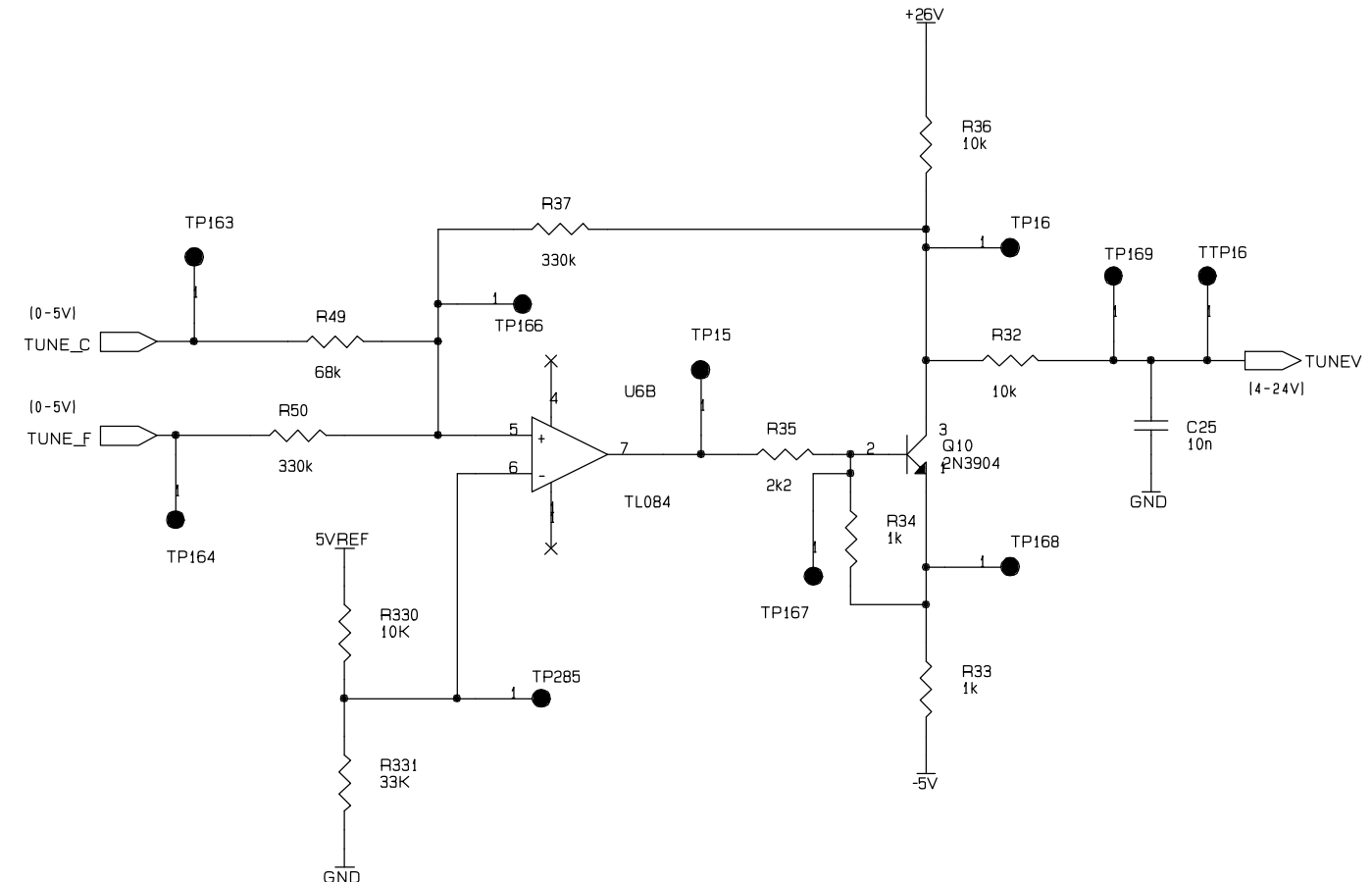
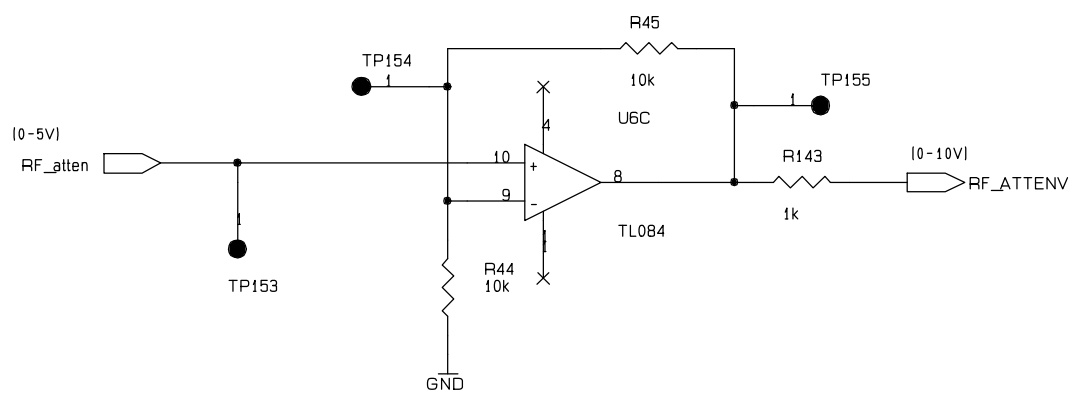
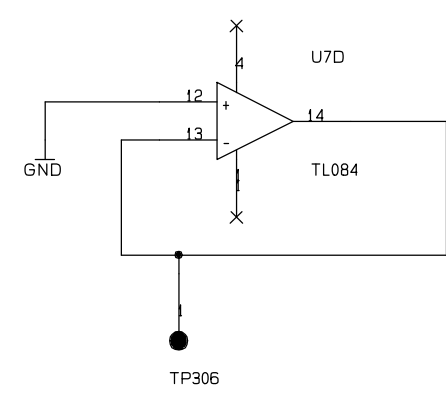
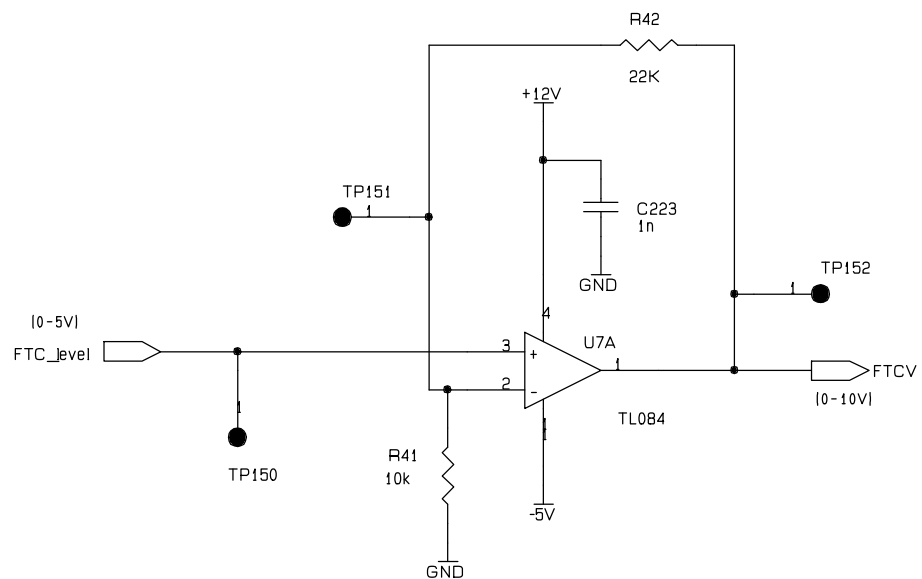
Raytheon Marine Europe		
ANCHORAGE PARK, PORTSMOUTH HAMPSHIRE PO3 5TD		
File Low Noise Converter (LNC)		
Size C	Document Number 4346-028	Rev M
Date: Wednesday, October 20, 1999	Sheet 1	of 1



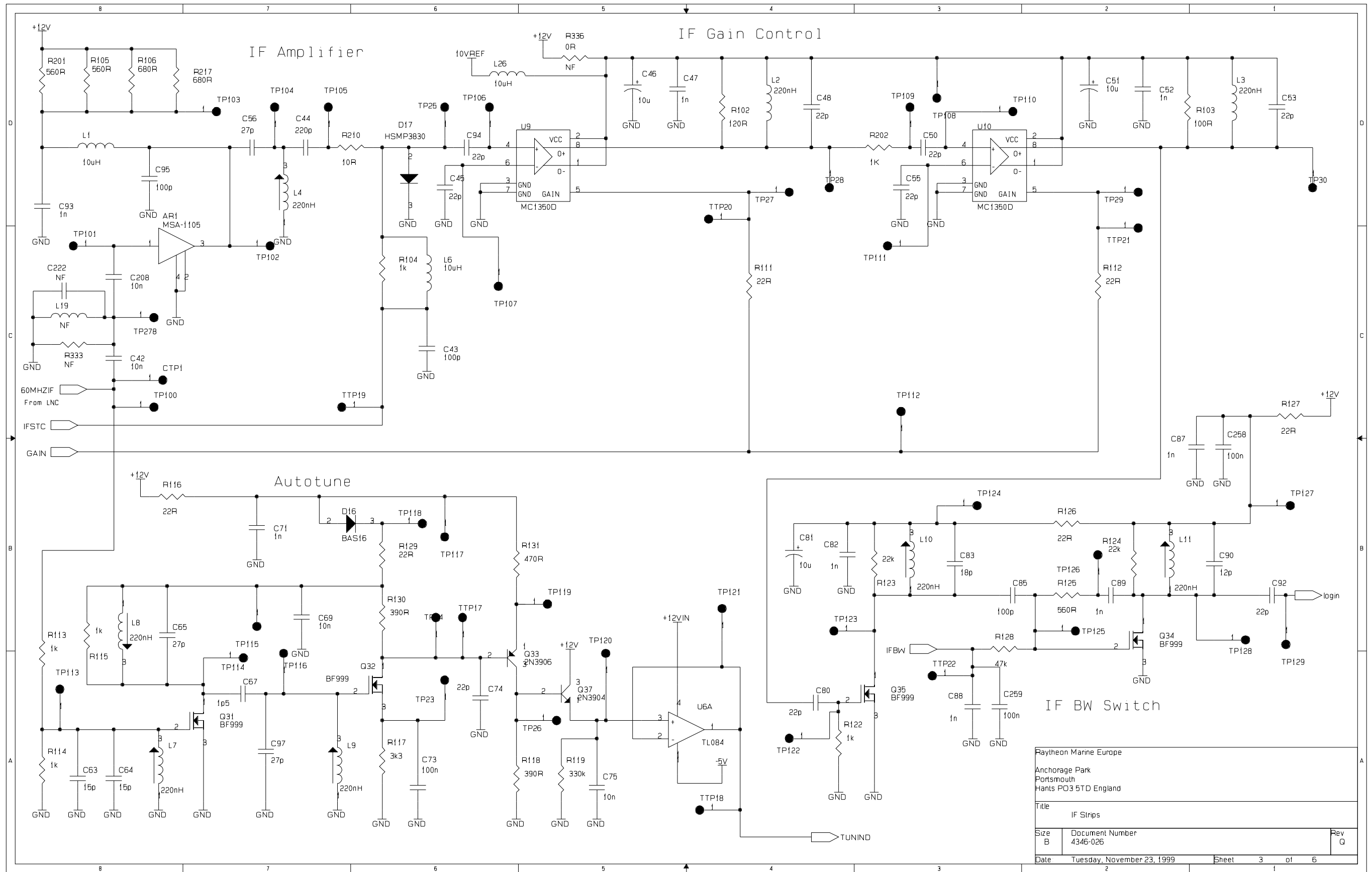
ISS	DESCRIPTION OF CHANGE	DATE
Q	Updated for FTC mods (DA and Radome) and Rain clutter mod (DA only) ECN's 4346-007/024 & 4346-025/003	23.11.99
P	Updated for Open Array release	21.06.99
N	Final changes for approved issue P PCB Radome build	05.02.99
M	Mods for issue P PCB	05.01.99
L	47p and 12pF mods issue N PCB	14.10.98
K	MODS FOR ISSUE N PCB	07.10.98
J	MODS FOR ISSUE M PCB	18.09.98
G	MODS FOR ISSUE L PCB (LOG AMP AND OPEN ARRAY)	01.07.98
F	MODS FOR ISSUE K PCB	04.06.98
E	TOP SHEET CLARIFIED FOR SERVICE MANUAL Mods for issue J PCB	08.09.97
D	CORRECTIONS TO VALUES - C89 WAS 2n2 NOM 1nF C90 WAS 150 NOM 120	09.05.97
C	FIRST ISSUE	09.04.97

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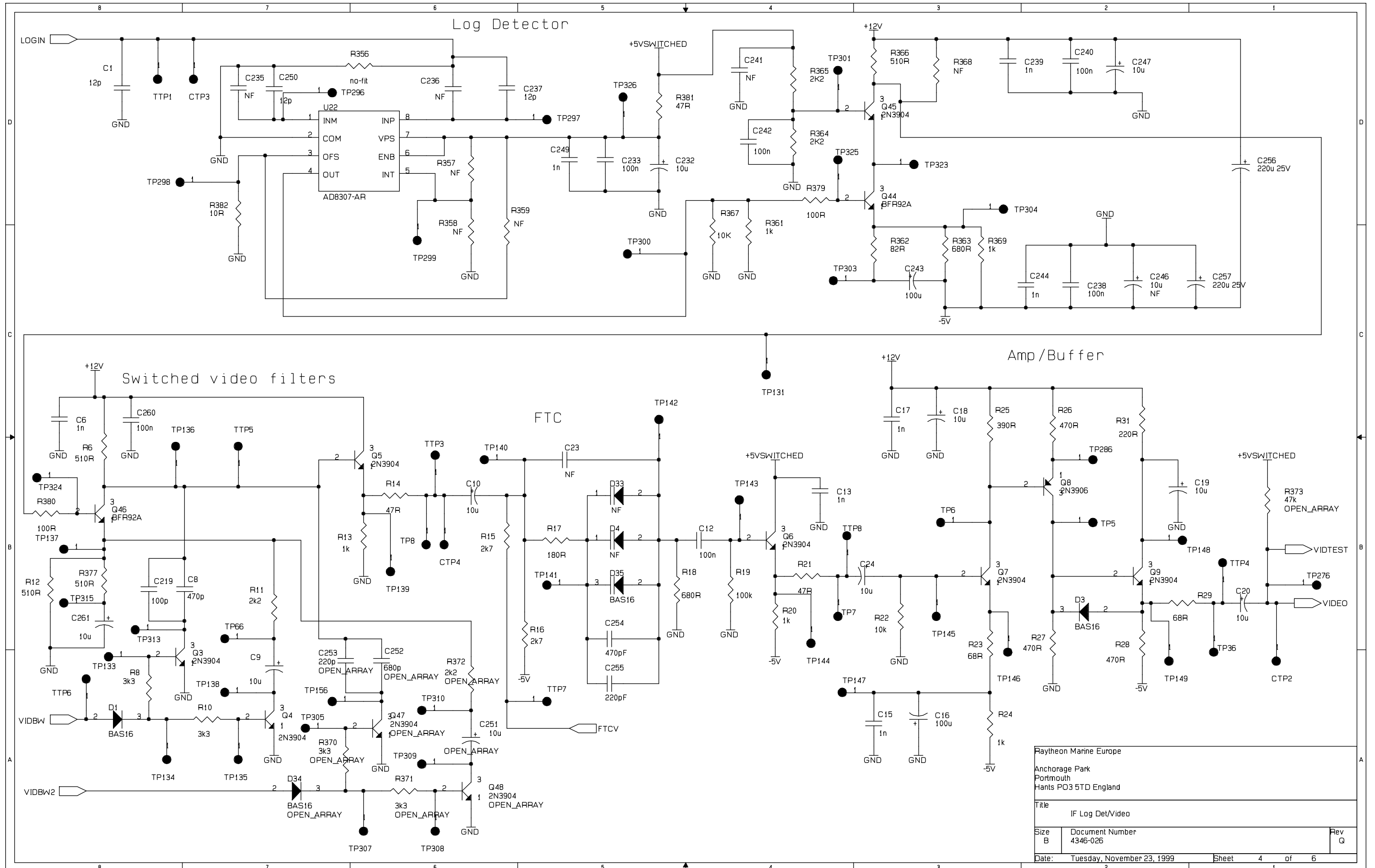
File: F Receiver
See C Document Number: 4346-026
Date: Tuesday, November 23, 1999 Sheet: 1 of 6



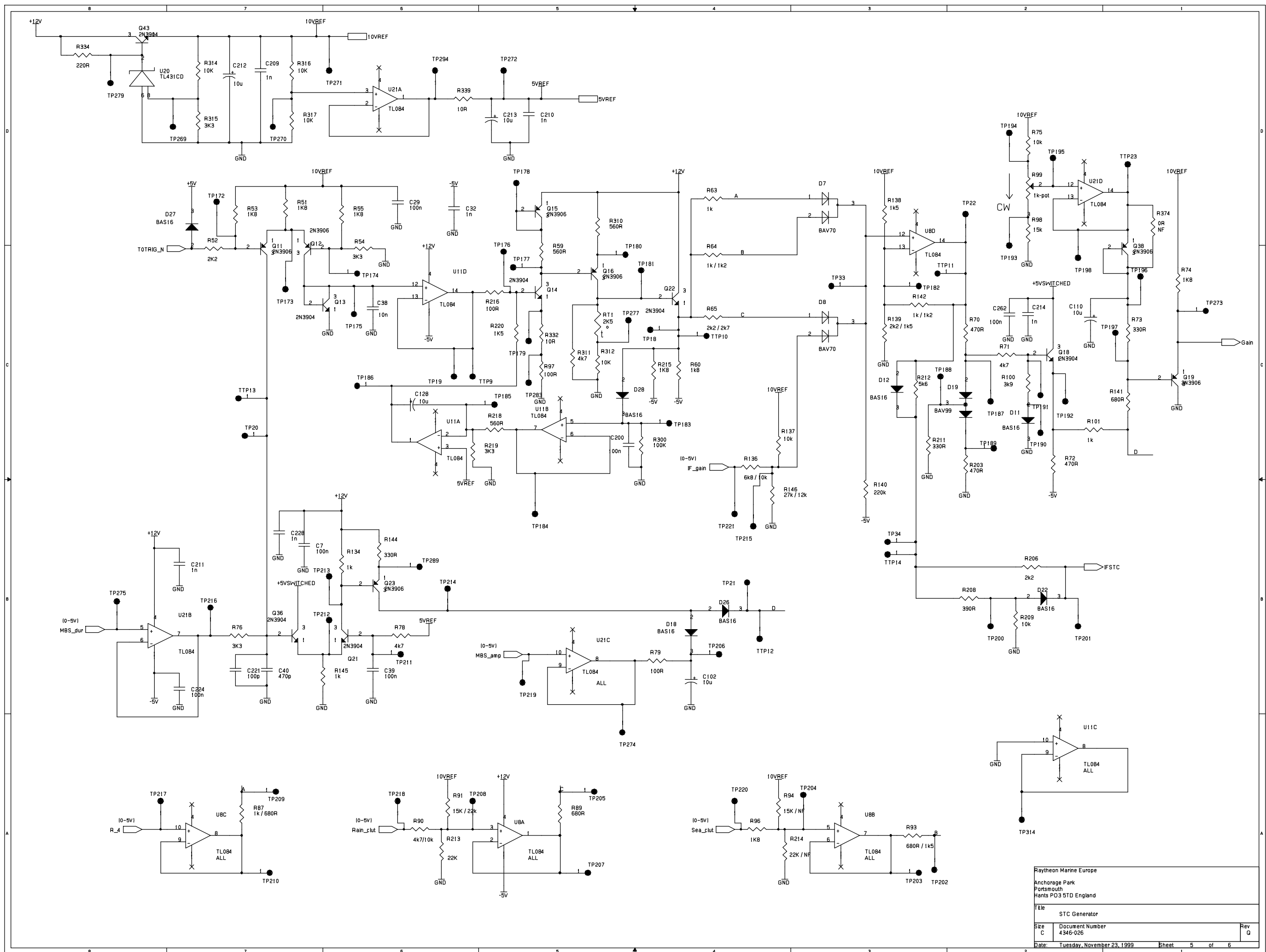
Raytheon Marine Europe		
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Title Control Interface		
Size B	Document Number 4346-026	Rev Q
Date: Tuesday, November 23, 1999	Sheet 2	of 6



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Title IF Strips		
Size B	Document Number 4346-026	Rev G
Date Tuesday, November 23, 1999	Sheet 3	of 6



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Title IF Log Det/video		
Size B	Document Number 4346-026	Rev G
Date: Tuesday, November 23, 1999	Sheet 4	of 6

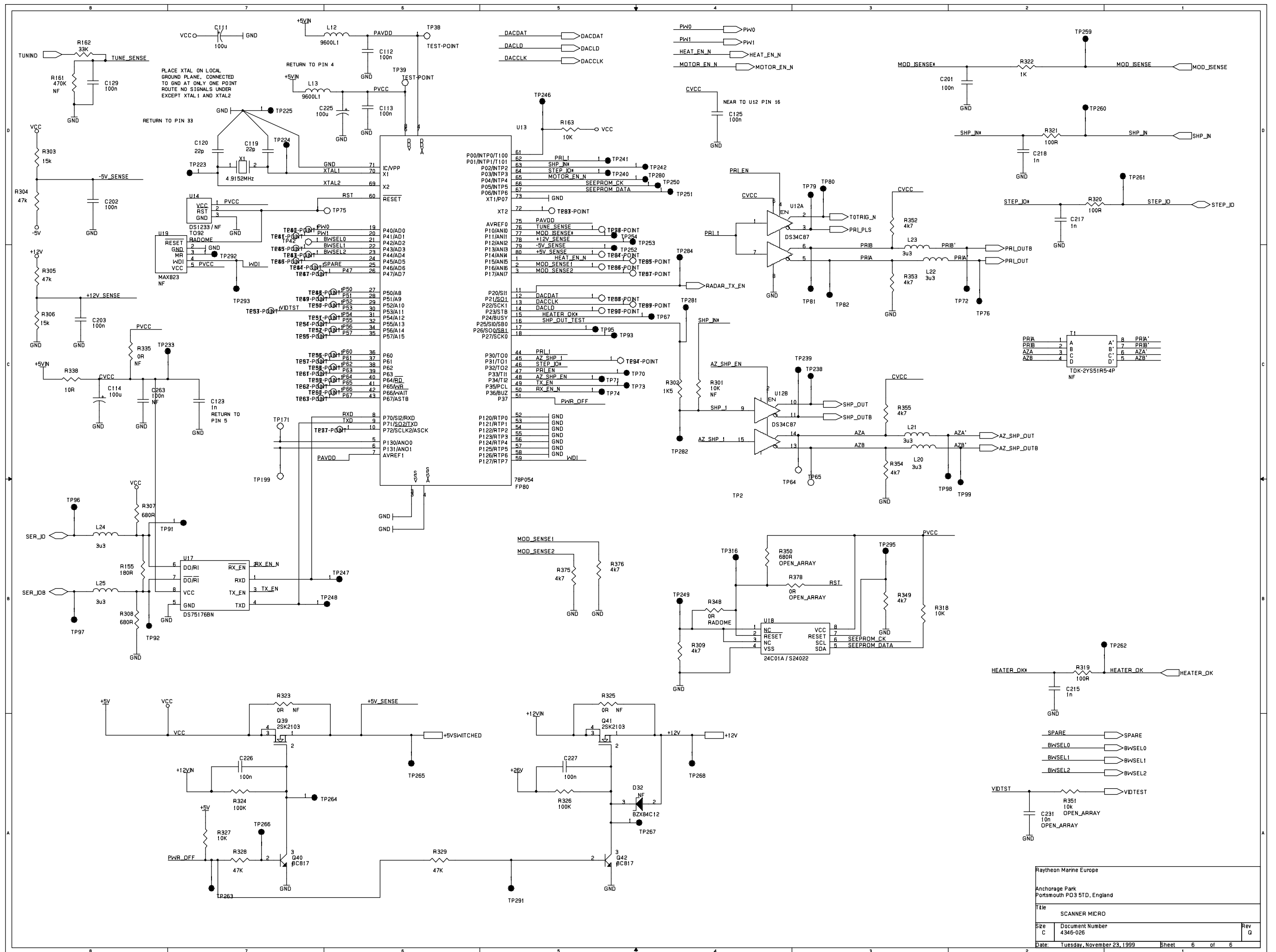


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Title: STC Generator

Size: C Document Number: 4346-026 Rev: Q

Date: Tuesday, November 23, 1999 Sheet: 5 of 6



PLACE XTAL ON LOCAL GROUND PLANE, CONNECTED TO GND AT ONLY ONE POINT. ROUTE NO SIGNALS UNDER EXCEPT XTAL1 AND XTAL2

PRIA	1	A	8	PRIA'
PRI B	2	B	7	PRI B'
AZA	3	C	6	AZA'
AZB	4	D	5	AZB'

TDK-2Y951R5-4P
NF