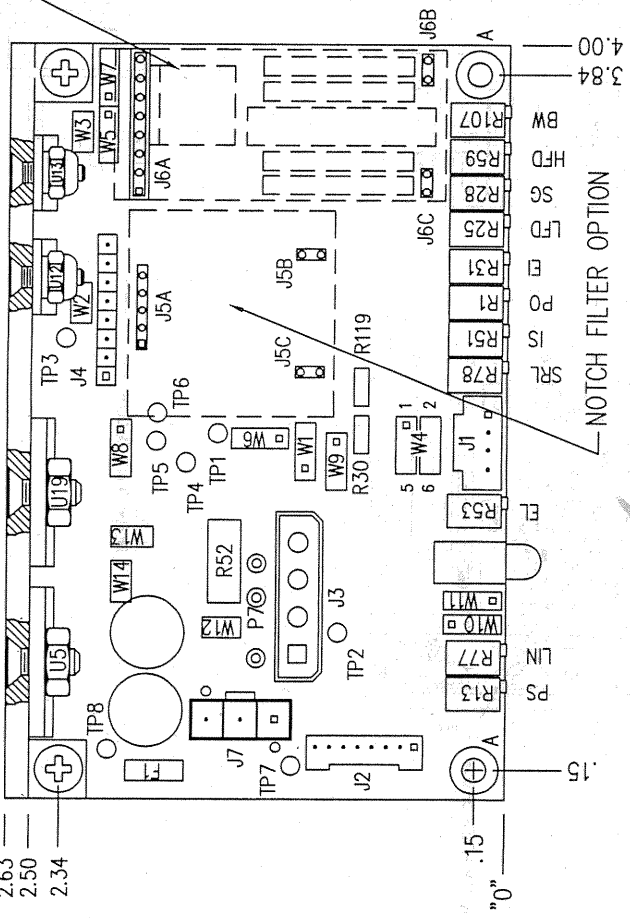


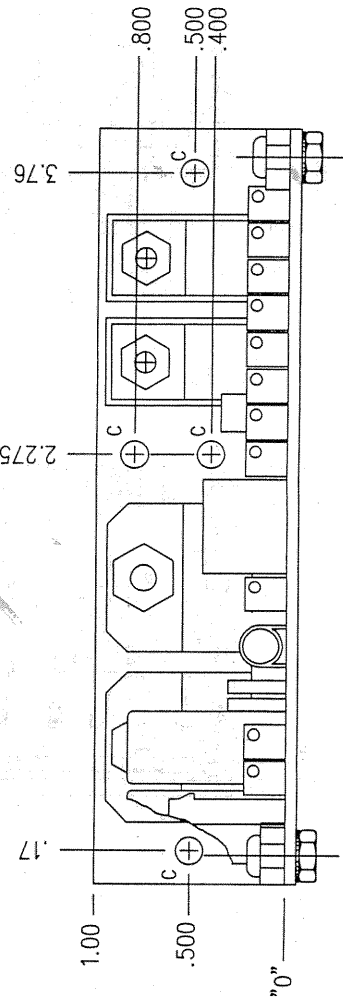
These drawings and specifications are the property of Cambridge Technology, Inc. and shall not be reproduced, stored in a retrieval system, or used in any form or by any means, without the written permission of Cambridge Technology, Inc.

REV	REV	DESCRIPTION	DATE
001	001	INITIAL RELEASE	PHI 07/78
002	002	REVISED TO ADD TO SHEET 3	PHI 07/78
003	003	REVISED TO ADD TO SHEET 2	PHI 07/78
004	004	REVISED TO ADD TO SHEET 1	PHI 07/78
005	005	REVISED TO ADD TO SHEET 4	PHI 07/78
006	006	REVISED TO ADD TO SHEET 5	PHI 07/78

DIGITAL INPUT OPTION
(6756)

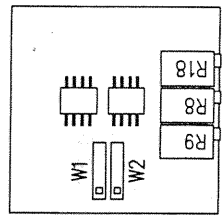
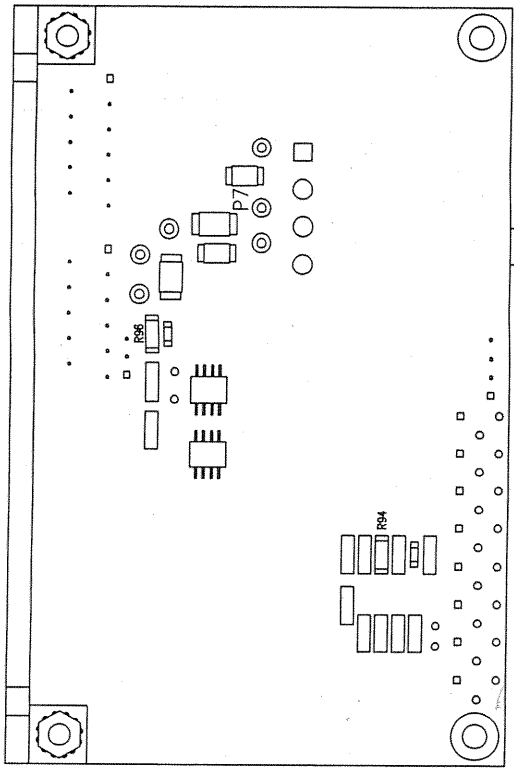


NOTCH FILTER OPTION



HOLE	QTY	SIZE
A	2	Ø.125 THRU
B	2	Ø.145 THRU, 82°C SINK TO Ø.300 (FAR SIDE)
C	4	Ø.145 THRU
D	2	Ø.125 THRU, 82°C SINK TO Ø.250 (FAR SIDE)

NOTES:
1. FOR ALL CONNECTORS, SQUARE PAD DENOTES PIN "1".



DIGITAL INPUT OPTION

UNLESS OTHERWISE SPECIFIED	TOLERANCES	XX = ±0.010	XXX = ±0.005	() = ANGLES 0°-30°	APPR = SURFACE ROUGHNESS RY	BREAK ALL SHARP EDGES	
DRN	PHI	1/2/78	CAMBRIDGE TECHNOLOGY, INC.	100 SMITH PLACE	CAMBRIDGE, MA 02136 - USA	671 SERVO DRIVER OUTLINE DWG	
DES	CHK	ENG	PROJ	REV	G	D04244	
MATERIAL						USED ON	SCALE 2X SHEET 1 OF 4

These drawings and specifications are the property of CAMBRIDGE TECHNOLOGY and shall not be reproduced, copied, or used in any form for the manufacture, sale, or use of any product without the written permission of CAMBRIDGE TECHNOLOGY, INC.

REV	DESCRIPTION	CHK	DATE
	SEE SHEET 1 FOR REVISIONS		

J1 (4 PIN) COMMAND INPUT CONNECTOR

PIN #	SIGNAL NAME
1	COMMAND (-)
2	COMMAND GND (SHIELD)
3	COMMAND (+)
4	OFFSET INPUT

J2 (8 PIN) MOTOR CONNECTOR

PIN #	SIGNAL NAME
1	IA
2	IB
3	PD GND
4	AGC RET
5	AGC OUT
6	PD SHIELD
7	+ 15V OUT
8	- 15V OUT

J3 (4 PIN) INPUT POWER CONNECTOR

PIN #	SIGNAL NAME
1	+ DRIVE VOLTAGE INPUT
2	+ DRIVE RETURN (GND)
3	- DRIVE RETURN (GND)
4	- DRIVE VOLTAGE INPUT

TUNING TRIM POINTS FUNCTION

TRIM	FUNCTION
R1	POS. OFFSET (PO)
R13	POS. SCALE FACTOR (PS)
R25	LOW FREQ. DAMPING (LFD)
R28	SERVO GAIN (SG)
R31	ERROR INTEGRATOR GAIN (EI)
R51	INPUT SCALE ADJUST (IS)
R53	ERROR LIMITER (EL)
R59	HI FREQ. DAMPING (HFD)
R77	POS. LINEARITY ADJUST (LIN)
R78	SLEW RATE LIMITER (SRL)
R107	BANDWIDTH ADJ (BW)

J1* (30 PIN) DIGITAL PARALLEL INTERFACE

PIN #	LABEL	NOTES
1	DB6	
2	DB14	
3	CLR	
4	DB15	MS Bit
5	LDXC	DAC latch
6	DB12	
7	CS	
8	DB13	
9	GND	
10	DB10	
11	GND	
12	DB11	
13	R/W	
14	DB8	
15	GND	
16	DB9	
17	DB5	
18	DB0	LS Bit
19	GND	
20	DB7	
21	GND	
22	DB2	
23	GND	
24	DB1	
25	GND	
26	DB3	
27	GND	
28	DB4	
29	GND	
30	GND	

J4 (8 PIN) OBSERVATION/CONTROL PORT

PIN #	SIGNAL NAME
1	VELOCITY OUT
2	POSITION OUT
3	GND #2
4	ERROR OUT
5	CURRENT OUT
6	90% MAX PWR FLAG OUTPUT
7	FAULT FLAG OUTPUT
8	REMOTE SHUTDOWN INPUT

J5 (5 PIN) NOTCH FILTER HEADER

PIN #	SIGNAL NAME
1	NOTCH FILTER INPUT
2	NOTCH FILTER OUTPUT
3	+ 15V
4	GND #1
5	- 15V

J6 (8 PIN) DIGITAL INPUT OPTION HEADER

PIN #	SIGNAL NAME
1	VDAC16
2	GND #7
3	+ VREF
4	- VREF
5	GND #4
6	+ 5V
7	+ 15V
8	- 15V

J7 (3 PIN) MOTOR CONNECTOR

PIN #	SIGNAL NAME
1	MOTOR SHIELD
2	- MOTOR
3	+ MOTOR

TEST POINTS FUNCTION

TEST POINTS	FUNCTION
TP1	POSITION SIGNAL, VP
TP2	GND #1
TP3	CURRENT MONITOR
TP4	MUTE PIN
TP5	NOTCH FILTER INPUT
TP6	NOTCH FILTER OUTPUT
TP7	AGC OUT
TP8	POWER AMP OUTPUT

JUMPERS CONFIGURATION

JUMPER	PINS	FUNCTION
W1	CLOSED	CLASS "0"
	OPEN	CLASS "1"
	1-2	CLASS "1"
W2, W3	1-2	±18V THRU ±30V DRIVE VOLTAGE INPUT
	1-2	±18V > DRIVE VOLTAGE INPUT > ±15V
W4	1-3	COMMON MODE NON INVERTING COMMAND INPUT
	3-4	COMMON MODE INVERTING COMMAND INPUT
	1-3	DIFFERENTIAL MODE COMMAND INPUT
W5	3-5	DIGITAL MODE NON-INVERTING COMMAND INPUT
	4-6	DIGITAL MODE INVERTING COMMAND INPUT
	5-6	DIGITAL MODE INVERTING COMMAND INPUT
W6	1-2	MIRROR ALIGNMENT
	2-3	CLOSE LOOP CONTROL SYSTEM
	2-3	CLASS "0"
W7	1	-5V REF OUT
	2	GND1 OUT
W8	1	+5V REF OUT
	2	SERVO WITH NOTCH FILTER
	3	SERVO WITHOUT NOTCH FILTER
W9	1-2	CLASS "1" ERROR OUT
	2-3	CLASS "0" ERROR OUT
W10	1	INPUT WITH SLEW RATE LIMITER
	2-3	INPUT WITHOUT SLEW RATE LIMITER
W11	1	INPUT WITH SLEW RATE LIMITER
	2-3	INPUT WITHOUT SLEW RATE LIMITER
W12	1	SINGLE OUTPUT POWER AMP W/O HPO
	2-3	DOUBLE OUTPUT POWER AMP WITHOUT HPO
W13	1-2	SINGLE OR DOUBLE OUTPUT POWER AMP WITH HPO
	1-2	SINGLE OR DOUBLE OUTPUT POWER AMP WITH HPO
W14	1-2	DBL OUTPUT PWR AMP WITHOUT HPO
	1-2	SINGL OUTPUT PWR AMP OR DBL OUTPUT PWR AMP WITH HPO

DATE	1/22/01	PH	
DES			
ENG			
APPR			
PROJECTION			
REVISION			
SCALE	1:1		
USED ON			
MATERIAL			
FINISH			
UNLESS OTHERWISE SPECIFIED			
TOLERANCES			
.XX = ±0.010			
.XXX = ±0.005			
() DIMENSIONS IN MM			
ADDRESS 10-207			
SURFACE ROUGHNESS 4/			
BREAK ALL SHARP EDGES			
CAMBRIDGE TECHNOLOGY, INC.			
100 SOUTH PLAZA			
CAMBRIDGE, MA 02138 - USA			
671 SERVO DRIVER			
OUTLINE DWG			
D04244			
SHEET 3 OF 4			