



Configuration Guide (Confidential)

Product Name: ChromaCast 82C205 Debug Board
Title: Schematic Revision 1.0 Specification
Date: October 25, 1999

Scope

This debug board will be based on 82C205 digital only Monitor Controller part along with AD9884A to support high-resolution SXGA panels.

Objective

This platform will be a debug form-factor monitor board consisting of one ChromaCast (82C205) device, AD9884A which houses A/D and PLL and RGB and Panel interface connectors. 82C205 controller has its 4MB separate SDRAM buffer.

Board Specification

- **Monitor Controllers**
 - OPTi 82C205 Rev 0.1 device
 - External PLL and A/D – AD9884A
 - 1X clock I/F between AD9884A and 82C205
 - PC Parallel Port I2C access to I²C devices registers for debug
 - External Mux on TV and VGA HSYNC and VSYNC routing to 205
- **Panel Support**
 - SXGA support
 - 36-bit Interface
- **TV Decoder**
 - Techwell TW98 External TV decoder (optional)
- **Microcontroller**
 - 8051
 - External 4Kbit serial E2PROM
 - External 64K EPROM
 - External Glue logic to connect to 205
- 8-bit External DIP switch Configuration Input
- Software I2C to access AD9884A and TW 98
- **VGA**
 - Standard 15 Pin DB Connector
 - DDC2B Interface EPROM Atmel 24C02
- **Memory**
 - On board 4MB SDRAM (2 chips)
 - Up to 100Mhz operation
- **Power Management**
 - Fully ACPI compliant
- **Microcontroller Firmware**
 - OPTi supplied
 - Monitor key pad handling
 - Power Control
- **Reset Control**
 - Reset switch for debug
 - Strap selection resistors
 - MAX707 based reset generation
- **Clocks**
 - AD9884A based PLL
 - Oscillator for 14.318Mhz input for Chromacast & 8051
- **Power Supply**
 - LTC16CG28 based 12V to 5V and 3.3V power supply
- **Logic Analyzer Test Headers for debug purposes**
- **Number of layers: 6**
- **Routing: 6 x 6 mils**
- **Form factor: OPTi Custom**

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Stuffing/Strap Options (Default Options)

Panel Type Selection:

Panel Type	MD[9:6]	Resistors Stuffed	Resistors Not Stuffed
TFT333	0100	R28 R38 R45 R47	R31 R34 R43 R53
TFT444	0101	R28 R38 R45 R53	R31 R34 R43 R47
TFT666	0110	R28 R38 R43 R47	R31 R34 R45 R53
TFT888	0111	R28 R38 R43 R53	R31 R34 R45 R47
TFT333E	1000	R31 R34 R45 R47	R28 R38 R43 R53
TFT444E	1001	R31 R34 R45 R53	R28 R38 R43 R47
TFT666E	1010	R31 R34 R43 R47	R28 R38 R45 R53

Source of HSync & Vsync for 80C205:

Hsync & Vsync from:	Resistors Stuffed	Resistors Not Stuffed
ADC 1535	R116	R117
VGA Connector	R117	R116

Hsync from ADC can be selected from ADCHSYNC (R116) or ADCDE (R118) or REF (119)

ADC clock selection:

Mode	Resistors Stuffed	Resistors Not Stuffed
Normal clock	R87	R158
Inverted clock	R158	R87

Jumper Selections:

JP6 -- On Board DDC EEPROM Programming

On Board Programming	JP6: 1-2	JP6: 3-4	JP6: 5-6
Enable	In	In	In
Disable	Out	Out	Out

Switch Settings:

SW1: OSD Control signals:

8	7	6	5	4	3	2	1
Not defined	EEPROM 0: Normal Mode 1: Reset EEPROM to Default	Memory Operation 0: Normal Memory operation 1: Memory Bypass mode	On Board DDC EEPROM Programming 0: Disable 1: Enable	Not defined	Panel Timing 0: Type 0 Panel Timing 1: Type 1 Panel Timing	Panel Type Select: 00: 640x480 Panel 01: 800x600 Panel 10: 1024x786 Panel 11: 1280x1024 Panel	

Push Button switch assignments:

- S8: "BACK" for OSD
S7: "FORWARD" for OSD
S6: "-" for OSD
S5: "+" for OSD
S4: "Input selection – VGA/S_VIDEO/RCA
S3: Board reset
S2: Power On/Off
S1: Not defined
S9: Board reset

Micro-controller port bit assignments:

Micro-controller Port P1:

7	6	5	4	3	2	1	0
SDA for onboard I2C bus	SCL for onboard I2C bus	ENPVDD – Panel power control: 0: Panel power OFF 1: Panel power ON	CS for 4K-bit OSD EEPROM	Enable Backlight: 0: Back-light disabled 1: Back-light enabled	HSYNC/VSYNC select: 0: HSYNC_TV/VSYN_C_TV 1: HSYNC_VA/VSYN_C_VA	DO for 4K bit OSD EEPROM	DI for 4K bit OSD EEPROM:

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Micro-controller Port P3:

7	6	5	4	3	2	1	0
CPU_RD# from CPU 82C205	CPU_WR# from CPU 82C205	SK for 4K-bit OSD EEPROM	Front Panel Reset control 0: Reset disabled 1: Reset enabled	INTX#1 Interrupt from CPU 82C205	INT#0 Not used	VSYNC input	FPEN – Flat Panel Enable (DSTN) 0: Panel Disabled 1: Panel Enabled

Pin Definitions:

J7: 15 Pin VGA Connector:

1	Red
2	Green
3	Blue
4	M_ID2
5	VGA_CN_ON#
6	GND
7	GND
8	GND
9	AVCC3
10	GND
11	M_ID0
12	VGA_SDA
13	HSYNC
14	VSYNC
15	VGA_SCL

J9 – TV Input (S-Video):

1	CVBS
2	AGND
3	NC
4	NC
5	AGND
6	INTENSITY
7	NC
8	COLOR



J10 – TV Input (Composite):

1	CVBS
2	AGND

J8 – Power Input (RCA Jack):

1	+12V
2	GND

JP10 – Power Input (Terminal Block)

1	+12
2	GND
3	NC
4	NC

JP7– Power Input (Terminal Block), Alternate for Onboard Switching Supply:

1	DVCC5
2	GND
3	GND
4	DVCC3

J2 – Parallel Interface for ADC I²C debug port:

1	NC	2	NC
3	NC	4	NC
5	NC	6	NC
7	NC	8	NC
9	-SDA	10	NC
11	SDAread	12	Pullup
13	NC	14	NC
15	SCLread	16	NC
17	-SCL	18	NC
19	NC	20	NC
21	GND	22	NC

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23	GND	24	GND
25	GND	26	GND

J3 – Alternate connector for ADC I²C debug port:

Pin	Signal
1	DVCC5
2	GND
3	SDA
4	SCL

JP9 – CCFL Inverter Module Connector:

Pin	Signal
1	PEN+12
2	PEN+12
3	DGND_12
4	DGND_12
5	ENPBLT
6	BRIGHT
7	NC
8	NC

JP6 – DDC EEPROM Programming Header:

Pin	Signal
1	SCL
2	DDC_SCL
3	SDA
4	DDC_SDA
5	DDC_PGM
6	GND

JP3 – LCD Connector:

Pin	Signal	Pin	Signal
1	FP_R0	2	FP_R8

Pin	Signal	Pin	Signal
3	FP_R1	4	FP_R9
5	FP_R2	6	FP_R10
7	FP_R3	8	FP_R11
9	FP_R4	10	FP_R12
11	FP_R5	12	FP_R13
13	FP_R6	14	FP_R14
15	FP_R7	16	FP_R15
17	FP_G0	18	FP_G8
19	FP_G1	20	FP_G9
21	FP_G2	22	FP_G10
23	FP_G3	24	FP_G11
25	FP_G4	26	FP_G12
27	FP_G5	28	FP_G13
29	FP_G6	30	FP_G14
31	FP_G7	32	FP_G15
33	FP_B0	34	FP_B8
35	FP_B1	36	FP_B9
37	FP_B2	38	FP_B10
39	FP_B3	40	FP_B11
41	FP_B4	42	FP_B12
43	FP_B5	44	FP_B13
45	FP_B6	46	FP_B14
47	FP_B7	48	FP_B15
49	FPSHIFTX	50	FPENX
51	FPFRAMEX	52	DGND
53	FPLINEX	54	DGND
55	DEX	56	DGND
57	PENVDD	58	DGND
59	PENVDD	60	DGND

JP11 – LCD Panel connector pin assignment:

Note: Pin assignment for JP2 is same as that of JP11 pins 1 to 60. Pin assignment for JP8 is same as that of JP11 pins 61-70.

Pin	Signal	Pin	Signal
1	DGND	2	FPSHIFTX

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Pin	Signal	Pin	Signal
3	DGND	4	FP_R2
5	FP_R3	6	FP_R4
7	DGND	8	FP_R5
9	FP_R6	10	FP_R7
11	DGND	12	FP_R10
13	FP_R11	14	FP_R12
15	DGND	16	FP_R13
17	FP_R14	18	FP_R15
19	DGND	20	FP_G2
21	FP_G3	22	FP_G4
23	DGND	24	FP_G5
25	FP_G6	26	FP_G7
27	DGND	28	FP_G10
29	FP_G11	30	FP_G12
31	DGND	32	FP_G13
33	FP_G14	34	FP_G15
35	DGND	36	FP_B2
37	FP_B3	38	FP_B4
39	DGND	40	FP_B5
41	FP_B6	42	FP_B7
43	DGND	44	FP_B10
45	FP_B11	46	FP_B12
47	DGND	48	FP_B13
49	FP_B14	50	FP_B15
51	DGND	52	FPFRAMEX
53	FPLINEX	54	DEX
55	DGND	56	DGND
57	PENVDD	58	PENVDD
59	PENVDD	60	PENVDD
61	NC	62	NC
63	NC	64	NC
65	NC	66	NC
67	DGND	68	NC
69	DGND	70	DGND

Debug Headers:

J4: Blue and Red digital data from ADC

Pin	Data	Pin	Data
1	NC	2	NC
3	NC	4	B7
5	B6	6	B5
7	B4	8	B3
9	B2	10	B1
11	B0	12	R7
13	R6	14	R5
15	R4	16	R3
17	R2	18	R1
19	R0	20	DGND

J5: Green digital data and control signals from ADC

Pin	Signal	Pin	Signal
1	NC	2	NC
3	NC	4	VCLK1
5	NC	6	NC
7	NC	8	NC
9	VSYNCH	10	NC
11	HSYNCH	12	G7
13	G6	14	G5
15	G4	16	G3
17	G2	18	G1
19	G0	20	DGND

J1: SDRAM Control signals:

Pin	Signal	Pin	Signal
1	NC	2	NC
3	NC	4	MCLK0
5	SDRAS#0	6	WE#0
7	SDCAS#0	8	BS
9	SDCS#	10	MA9

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Pin	Signal	Pin	Signal
11	MA8	12	MA7
13	MA6	14	MA5
15	MA4	16	MA3
17	MA2	18	MA1
19	MA0	20	DGND

Bill of Materials

Item	Qty	Reference	PCB Footprint	Mfg	Description	Part No
1	104	C1,C2,C3,C4,C5,C7,C8,C9, C10,C12,C13,C14,C15,C17, C18,C19,C20,C21,C22,C23, C24,C25,C26,C29,C30,C31, C32,C33,C34,C35,C36,C37, C38,C39,C40,C41,C42,C43, C44,C46,C49,C51,C53,C54, C56,C57,C61,C62,C66,C69, C73,C75,C78,C79,C83,C84, C90,C108,C109,C121,C127, C128,C131,C132,C134,C136, C139,C140,C142,C152,C155, C156,C157,C158,C159,C160, C161,C164,C165,C166,C167, C168,C170,C171,C173,C175, C176,C181,C182,C183,C184, C187,C188,C189,C190,C191, C192,C193,C194,C195,C196, C197,C198,C199	C0603	AVX	Cap, X7R, 0.1uF, 10V, 20%	0603ZC104MAT1A
2	21	C6,C11,C16,C27,C28,C45, C47,C48,C50,C64,C65,C67, C80,C82,C91,C115,C151, C162,C169,C172,C174	TANT_C	Kemet	Cap, Tantalum, 10uF, 25V	TCS106K25C
3	6	C52,C74,C88,C106,C143, C180	TANT_C	Kemet	Cap, Tantalum, 22uF, 25V	TCS226K25C
4	3	C55,C104,C179	TANT_C	Kemet	Cap, Tantalum, 47uF, 25V	TCS476K25C
5	1	C92	C0603	AVX	Cap, 15pF, NPO, 25V, 5%	06033A150JAT1A
6	3	C94,C95,C96	CC0603	AVX	Cap, X7R, 47nF, 10V, 20%	0603ZC473KAT1A
7	2	C98,C97	C0603	AVX	Cap, 22pF, NPO, 25V, 5%	06033A220JAT1A
8	3	C99,C100,C101	C0603	AVX	Cap, X7R, 0.01uF, 10V, 10%	0603ZC103KAT1A
9	6	C102,C103,C177,C178,C200, C201	C0603	AVX	Cap, 33pF, NPO, 25V, 5%	06033A330JAT1A
10	2	C110,C113	C0603	AVX	Cap, 180pF, NPO, 50V, 5%	06035A181JAT1A
11	4	C111,C112,C116,C117	C0603	AVX	Cap, 1000pF, NPO, 25V, 5%	06033A102JAT1A
12	1	C135	0805C	AVX	Cap, X7R, 1uF, 10V, 20%	0805ZC105MAT1A
13	1	C144	CAP\PAN\EEFU181, 180UF	Panasonic	Cap, Spcl Polymr, 180uF, 4V, 20%	EEFUE0G181R
14	1	C145	CAP\PAN\EEFU151, 150UF	Panasonic	Cap, Spcl Polymr, 150uF, 6.3V, 20%	EEFUE0J151R

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Item	Qty	Reference	PCB Footprint	Mfg	Description	Part No
15	1	C146	C0603	AVX	Cap, X7R, 1nF, 10V, 10%	0603ZC102KAT1A
16	1	C147	TACR475M010R,4.7UF	AVX	Cap, Tantalum, 4.7uF, 10V, 20%	TACR475M010R
17	3	C148,C149,C150	C0603	AVX	Cap, 10pF, NPO, 25V, 5%	06033A100JAT1A
18	1	C163	CAP\MAR\THCR70E,22UF	Marconi	Cap, Y5U, 22uF, 50V	THCR70E1H226ZT
19	1	C185	CC0603	AVX	Cap, 0.039uF, NPO, 25V, 5%	06033A393JAT1A
20	1	C186	CC0603	AVX	Cap, 0.0039uF, NPO, 25V, 5%	06033A392JAT1A
21	6	D1,D2,D3,D5,D9,D14	LED\1206	Stanley	LED, Red	BR1101W
22	15	D6,D7,D8,D10,D11,D12,D13,D17,D18,D19,D20,D21,D22,D25,D26	SOT23-BAS16	National	Diode, BAS16	BAS16
23	2	D15,D16	DIO\CENT\CMDSH-3	Central	Diode, Schottky, 30V, 0.1A	CMDSH-3TR
24	2	D24,D23	MBRM140T3	Motorola	Diode, Schottky, 40V, 1A	MBRM140T3
25	1	JP1	JUMPER\2	Amp	Header, 1X2	640452-2
26	1	JP2	HDR-30X2\POL	Thomas Betts	Header, 30X2	609-6027
27	1	JP3	HDR-30X2	Thomas Betts	Header, 30X2	609-6027
28	1	JP6	HDR-3X2	Amp	Header, 3x2, Vertical, 0.1"	103777-3
29	2	JP10,JP7	TMBLK	RIA	Conn, 4 Pin, Terminal Block	31059104
30	1	JP8	HDR-5X2	Berg	Header, 5X2	66506-066
31	1	JP9	HDR\8P\SMT\1.25M	Molex	Header, 8 Pin, SMT	53261-0890
32	1	JP11	CON-35X2\635M	Molex	Conn, 70 Pin, Receptacle	52851-0709
33	1	JP12	HDR\12P\SMT\1.0M	Molex	Conn, FFC, 1mm right angle	52271-1290
34	3	J1,J4,J5	HEADER20	Amp	Header, 2x10, vertical, 0.1"	1-103777-0
35	1	J2	HEADER26	AMP	Header, 2X13, Stright, 0.1" center	1-103777-3
36	1	J3	HEADER04	AMP	Header, 1X4	640452-4
37	1	J7	DB-15F	Kycon	Conn, 15 Pin, VGA	K66E15SN
38	1	J8	CON-DCPOWER	Kycon	Conn, Power	KLD-0202A
39	1	J9	CON-DIN\8P	CUI Stack	Conn, 4 Pos. Mini Din	MD-40SM
40	1	J10	TVCON\CS	Keystone	Conn, RCA Jack,	901K-ND
41	9	L1,L2,L3,L4,L5,L7,L12, L14,L20	1206	Steward	Ferrite Bead, 1.5A, 90 Ohms @100MHz	MI1206K900R
42	1	L9	1008	Panasonic	Inductor, SMT, 4.7uH	ELJ-FC4R7JF
43	3	L17,L18,L19	CC0805	Fair-Rite	Inductor, SMT, 120 Ohms @ 100MHz	2508051217Z0
44	2	L21,L22	IND\PAN\ETQP6F	Panasonic	Inductor, SMT, 10.2uH	ETQP6F10R2HFA
45	3	Q1,Q2,Q4	SOT23-BAS16	Zetex	Transistor, 2N2222A	FMMT2222A
46	2	Q5,Q6	MFETN\SI4920DY	Fairchild	MOSFET, Dual N-Channel, FDS8936A	FDS8936A

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Item	Qty	Reference	PCB Footprint	Mfg	Description	Part No
47	6	RA1,RA2,RA5,RA6,RA9,RA10	RP4X2	Bourns	Res Array, 4.7K	CAT16-472J4
48	2	RA7,RA3	RP4X2	CTS	Res Array, 2X4, 3.9K	742C083392JCT-ND
49	2	RA4,RA8	RP4X2	CTS	Res Array, 2X4, 3.3K,	742C083332JCT-ND
50	3	RA11,RA12,RA13	RP4X2	CTS	Res Array, 2X4, 22 Ohm,	742C083220JCT-ND
51	10	RA14,RA15,RA16,RA17,RA18, RA19,RA20,RA21,RA22,RA23	RP4X2	CTS	Res Array, 2X4, 33E	742C083330JCT-ND
52	10	RA24,RA25,RA26,RA27,RA28, RA29,RA30,RA31,RA32,RA33	RP4X2	KAO	Res Array, 2X4, 0E	CNZ1J4T
53	6	RA34,RA35,RA36,RA37,RA38, RA39	RP4X2	CTS	Res Array, 2X4, 51E	742C083510JCT-ND
54	1	RV2	SMPOT13269W	Bourns	Potentiometer, 5K	3269W-1-502
55	30	R1,R6,R10,R25,R26,R27, R28,R29,R30,R31,R33,R34, R36,R37,R38,R39,R41,R42, R43,R44,R45,R47,R49,R53, R75,R85,R86,R93,R162,R163	R0805	Panasonic	Resistor, Thick film, 4.7K, 5%, 1/10W	ERJ-6GEYJ472
56	5	R2,R15,R17,R57,R139	R0805	Panasonic	Resistor, Thick film, 1K, 5%, 1/10W	ERJ-6GEYJ102
57	2	R3,R16	R0805	Panasonic	Resistor, Thick film, 3.3K, 5%, 1/10W	ERJ-6GEYJ332
58	2	R4,R11	R0805	Panasonic	Resistor, Thick film, 3.9K, 5%, 1/10W	ERJ-6GEYJ392
59	10	R5,R7,R8,R9,R46,R48,R54, R56,R161,R174	R0805	Panasonic	Resistor, Thick film, 10K, 5%, 1/10W	ERJ-6GEYJ103
60	4	R12,R13,R14,R108	R0805	Panasonic	Resistor, Thick film, 680 Ohm, 5%, 1/10W	ERJ-6GEYJ681
61	11	R18,R19,R21,R22,R24,R35, R40,R50,R51,R52,R58	R0805	Panasonic	Resistor, Thick film, 22 Ohm, 5%, 1/10W	ERJ-6GEY22J0
62	2	R23,R20	R0805	Panasonic	Resistor, Thick film, 22 Ohm, 5%, 1/10W	ERJ-6GEY0R00
63	1	R32	R0805	Panasonic	Resistor, Thick film, 33E, 5%, 1/10W	ERJ-6GEY33J0
64	2	R77,R82	R0805	Panasonic	Resistor, Thick film, 330 Ohm, 5%, 1/10W	ERJ-6GEYJ331
65	2	R63,R66	R0805	Panasonic	Resistor, Thick film, 1.6K, 5%, 1/10W	ERJ-6GEYJ162
66	4	R76,R81,R136,R140	R0805	Panasonic	Resistor, Thick film, 47K, 5%, 1/10W	ERJ-6GEYJ473
67	3	R78,R79,R91	R0805	Panasonic	Resistor, Thick film, 510 Ohm, 5%, 1/10W	ERJ-6GEYJ511
68	2	R84,R88	R0805	Panasonic	Resistor, Thick film, 51 Ohm, 5%, 1/10W	ERJ-6GEY51J0
69	9	R87,R112,R120,R122,R125, R158,R165,R168,R172	CR0603	Panasonic	Resistor, Thick Film, 10 Ohm, 5%, 1/10W	ERJ-3GSY10J0
70	17	R90,R103,R106,R109,R110, R114,R116,R117,R131,R135, R157,R164,R169,R170,R175, R176,R177	C0603	Panasonic	Resistor, Thick film, 0 Ohm,	ERJ-3GSY0R00
71	1	R92	R0805	Panasonic	Resistor, Thick film, 1M Ohm, 5%,	ERJ-6GEYJ105



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Item	Qty	Reference	PCB Footprint	Mfg	Description	Part No
					1/10W	
72	3	R95,R96,R97	CR0603	Panasonic	Resistor, Thick film, 75 Ohm, 5%, 1/10W	ERJ-3GSY75J0
73	2	R102,R99	CR0603	Panasonic	Resistor, Thick film, 20K, 1%, 1/10W	ERJ-3EKFJ203
74	2	R100,R101	CR0603	Panasonic	Resistor, Thick film, 15K, 5%, 1/10W	ERJ-6GEYJ153
75	2	R104,R98	CR0603	Panasonic	Resistor, Thick Film, 105K, 1%, 1/10W	ERJ-3EKFJ1053
76	1	R105	CR0603	Panasonic	Resistor, Thick film, 63.4K, 1%, 1/10W	ERJ-3EKFJ6342
77	9	R121,R128,R130,R134,R141, R150,R151,R153,R154	R0805	Panasonic	Resistor, Thick film, 0 Ohm,	ERJ-6GEY0R00
78	2	R155,R124	CR0603	Panasonic	Resistor, Thick film, 1K, 5%, 1/10W	ERJ-3GSYJ102
79	2	R133,R132	LR1206-R015-F,.015	IRC	Res, Chip, 0.015 Ohm 1/4W, 1%	LR1206-010R015-F
80	5	R137,R143,R144,R146,R149	R0805	Panasonic	Resistor, Thick film, 27 Ohm, 5%, 1/10W	ERJ-6GEY27J0
81	5	R138,R142,R145,R147,R148	R0805	Panasonic	Resistor, Thick film, 75 Ohm, 5%, 1/10W	ERJ-6GEY75J0
82	1	R152	R0805	Panasonic	Resistor, Thick film, 2.2K, 5%, 1/10W	ERJ-6GEYJ222
83	1	R156	CR0603	Panasonic	Resistor, Thick film, 3.3K Ohm,	ERJ-3GSYJ332
84	3	R159,R160,R55	C0603	Panasonic	Resistor, Thick film, 150 Ohm, 5%, 1/10W	ERJ-3GSYJ151
85	2	R166,R171	C0603	Panasonic	Resistor, Thick film, 620 Ohm, 5%, 1/10W	ERJ-3GEYJ621
86	2	R167,R173	C0603	Panasonic	Resistor, Thick film, 200 Ohm, 5%, 1/10W	ERJ-3GEYJ201
87	1	SW1	SW8\SMT\GWA	Grayhill	Switch	90HBW08S
88	9	S1,S2,S3,S4,S5,S6,S7,S8, S9	SW-280	C & K	Switch, Push button	PTS635SL43
89	21	T1,T2,T3,T4,T5,T6,T7,T8, T9,T10,T11,T12,T13,T15, T20,T21,T22,T24,T26,T27,T28	TP	AMP	Header, 1X1	103741-1
90	1	U1	DIP28\600	National	IC EPROM, 27C512	NM27C512Q150
91	1	U2	DIP14\10L	TI	IC, Hex Inv. w/open collector outputs	SN74LS05D
92	2	U3,U4	QFP100-1	NEC	IC, SDRAM, UPD4811650GFA-10	UPD4811650GFA-10
93	4	U5,U10,U13,U18	MAX1615	Fairchild	IC, UHS Inverter w/Schmitt Trigger	NC7SZ14M5
94	3	U6,U7,U9	DIP20\10L	Philips	IC, Latch, 74F573	74F573D
95	1	U8	CC44-SKT	Philips	IC, Micro controller, 80C32	P80C32EBAA
96	1	U11	DIP20\10SOP	Philips	IC, 74LVC623PW	74LVC623PW
97	1	U12	SO16	Philips	IC, 3-8 Decoder, 74F138D	74F138D
98	1	U14	MAX1615	Fairchild	IC, NC7SZ08	NC7SZ08M5
99	1	U15	DIP14\10L	Philips	IC, AND gate, 74F32D	74F32D

Configuration Guide

Item	Qty	Reference	PCB Footprint	Mfg	Description	Part No
100	1	U16	PQFP208	OPTi	ChromaCast 82C205 LCD Monitor Controller	82C205
101	1	U17	DIP8\SO	Maxim	IC, MAX707, uP Supervisory ckt	MAX707CSA
102	1	U19	DIP8\SO	Fairchild	IC, EEPROM, 4K bits, NM93C66M	NM93C66M
103	1	U20	DIP14	ECS Inc.	OSC, 14.318MHz	OECS-143-1-A101A
104	1	U21	DIP20\SOL	Philips	IC, Octal Inverting Buffer	74ABT240D
105	2	U22,U25	DIP8\SO	Siliconix	IC, FET dual, SI4953DY	SI4953DY
106	1	U23	DIP8\SO	Atmel	IC, Serial EEPROM, AT24C02	AT24C02AN-10SC
107	1	U24	TO220	Linear Tech	IC, Linear Regulator, LT1584	LT1584CT-3.3
108	1	U26	QFP-128	Analog Devices	IC, ADC & PLL AD9884	AD9884AKS-140
109	1	U27	SO16	Philips	IC, Multiplexer	N74F157AD
110	1	U28	LTC1628CG28	Linear Tech	IC, Switching Regulator, LTC1628	LTC1628CG28
111	1	U29	PQFP100	Techwell	IC, TV Decoder, TW98	TW98
112	2	U31,U30	DIP8\SO	Analog Devices	IC, Regulator, 3.3V, LDO	ADP3303AR-3.3
113	1	U32	DIP14\SOL	Philips	IC, Schmitt trigger, 74LVT14	74LVT14D
114	1	XU1	TH	AMP	Socket, 28 pin Dip	2-640362-3
115	1	XU8	SMT	AMP	Socket, 44 pin PLCC	821575-1
116	1	XU20	DIP8	Aries	Socket, OSC	1107741
117	1	Y1	XTAL\UP	Ecliptek	Crystal, 55MHz	EC2-T-55M

Schematics

82C205 CHROMACAST DEBUG BOARD
WITH ADC AD9884

Sheet	Rev
1	1

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1	Block Diagram
2	Chromacast 82C205 - Video Interface
3	Chromacast 82C205 - Memory and CPU Interface
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5	Block Diagram
6	Chromacast 82C205 - Memory and CPU Interface
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17	Chromacast 82C205 - Memory and CPU Interface

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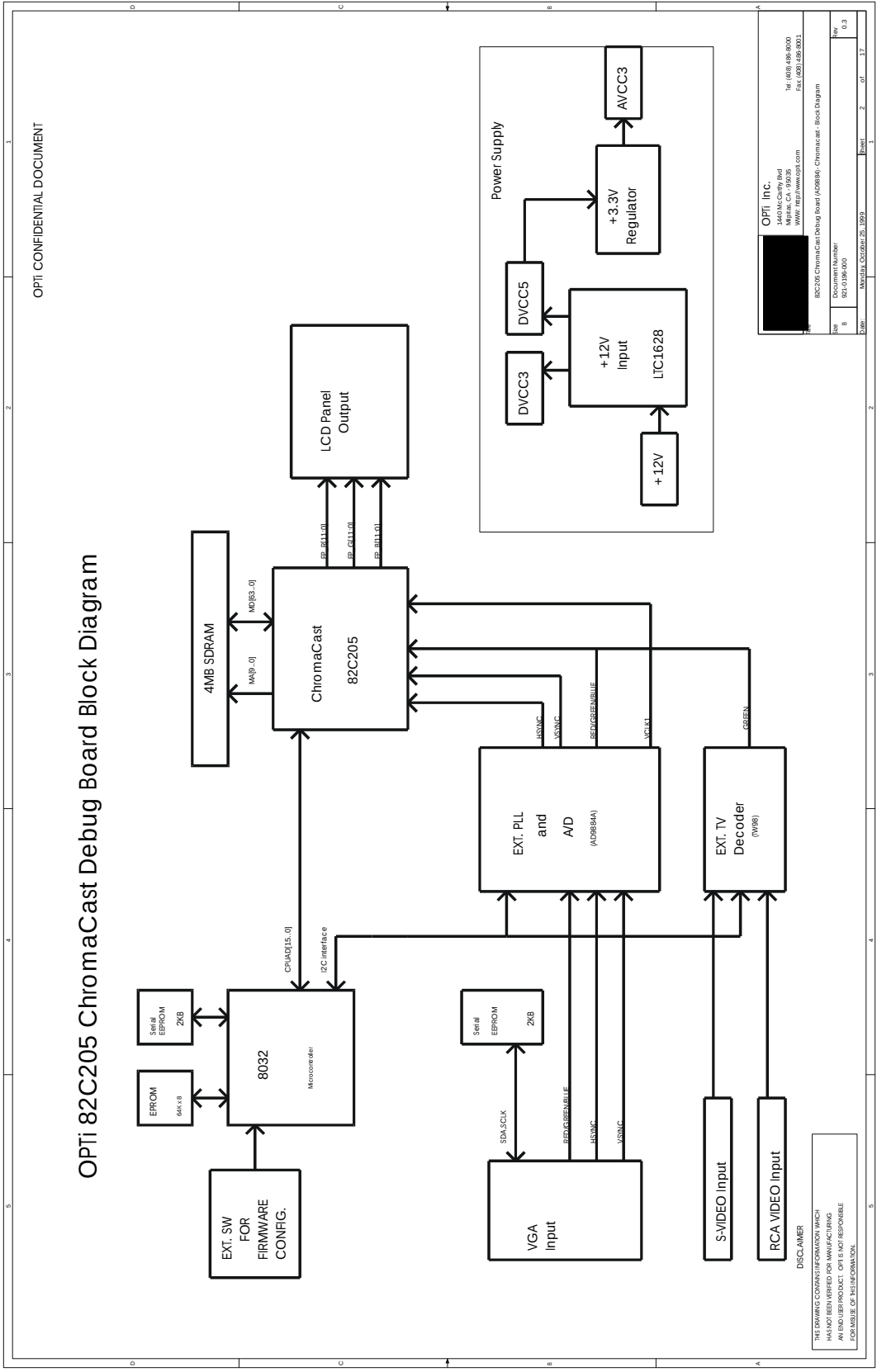
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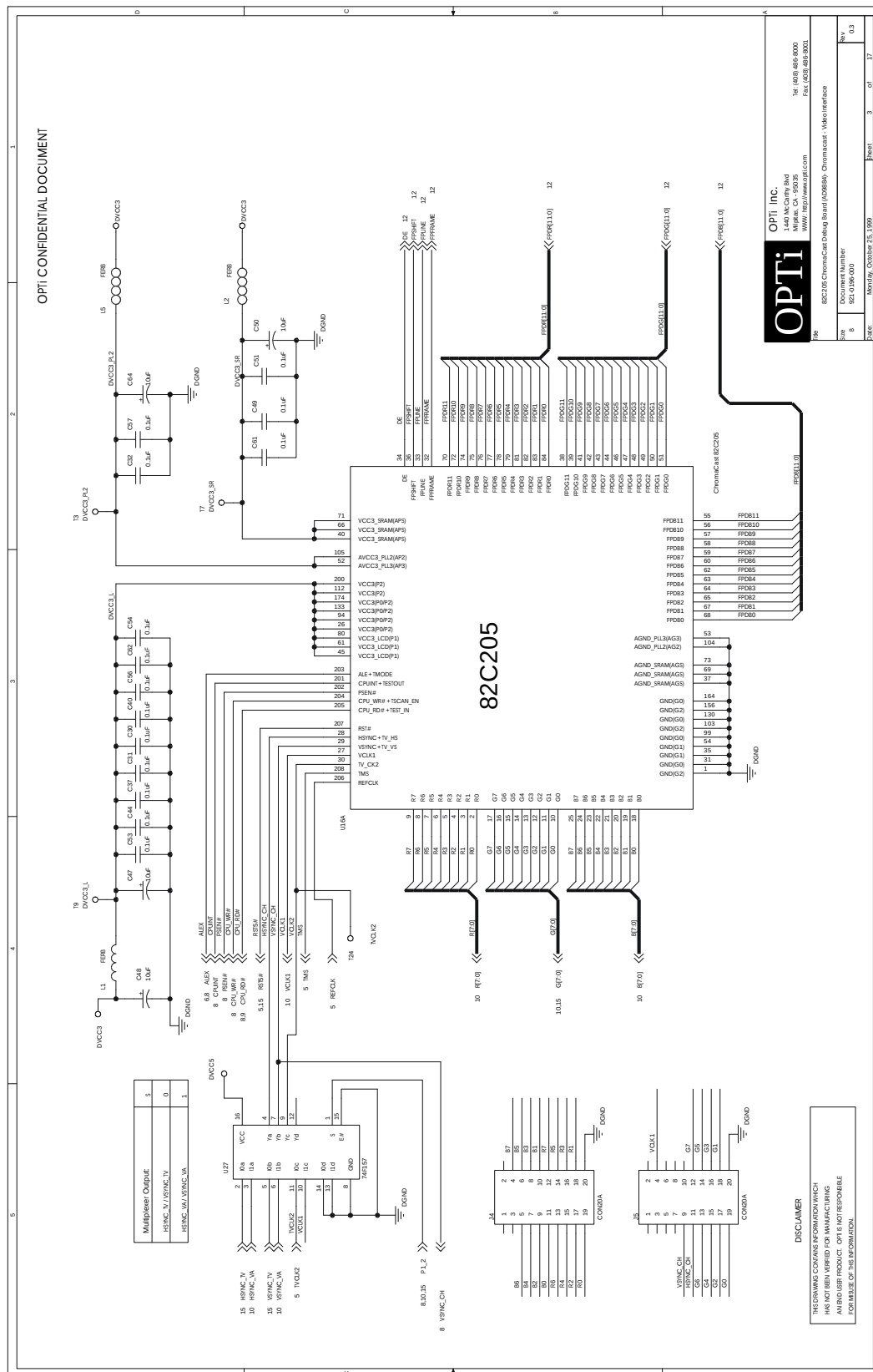
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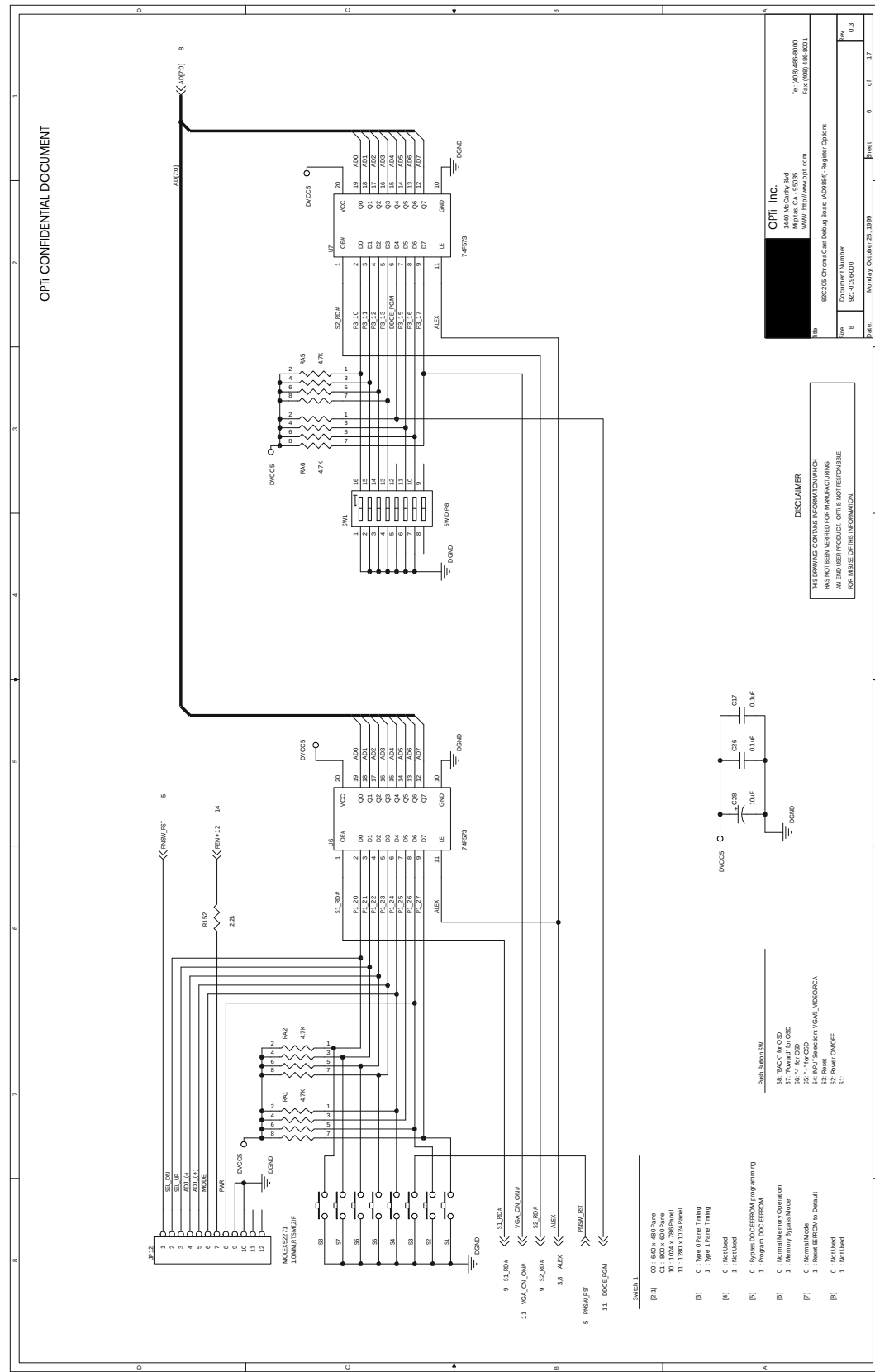
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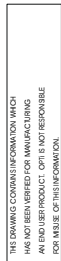


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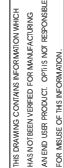




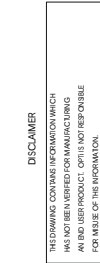
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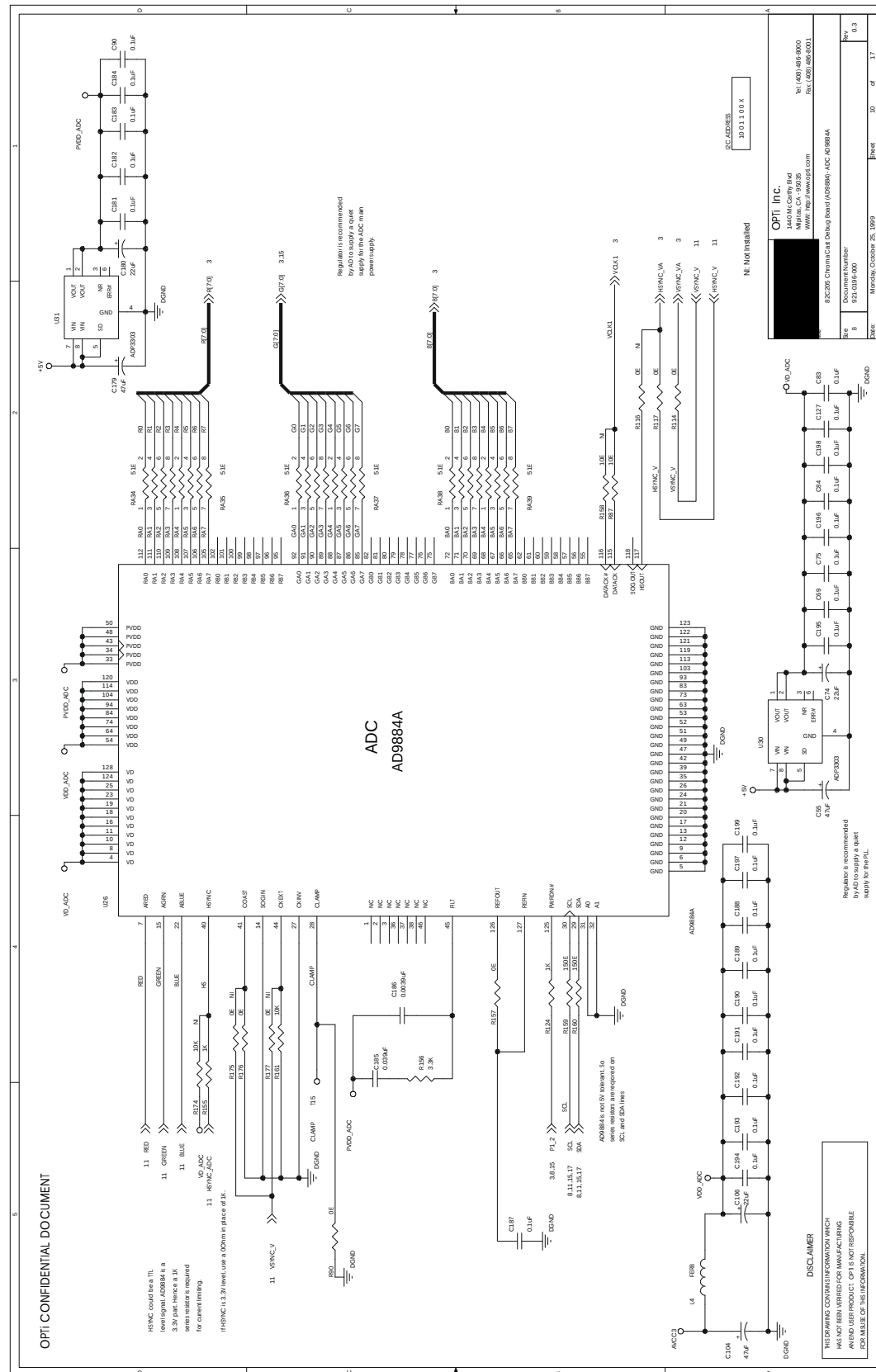


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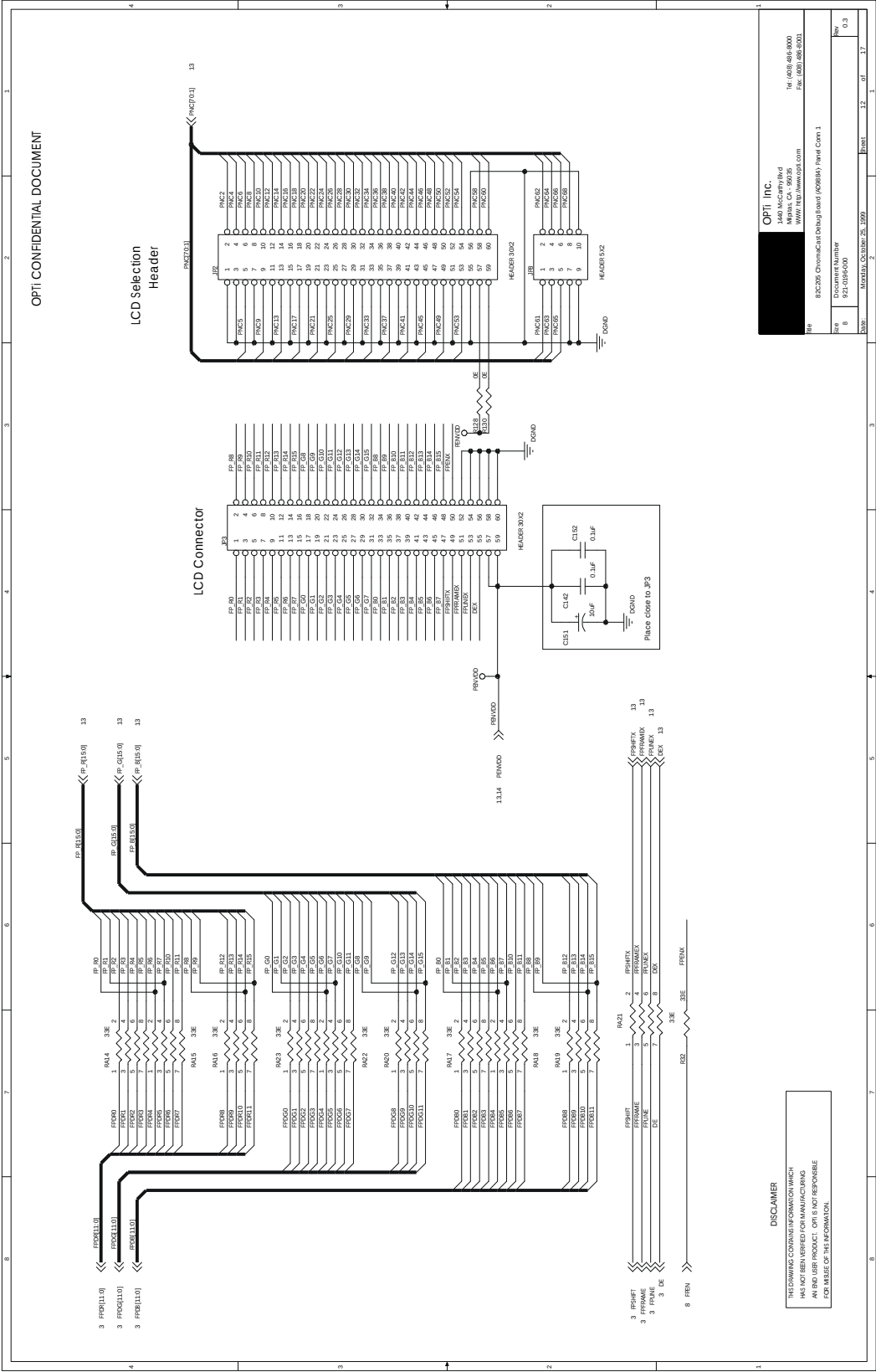
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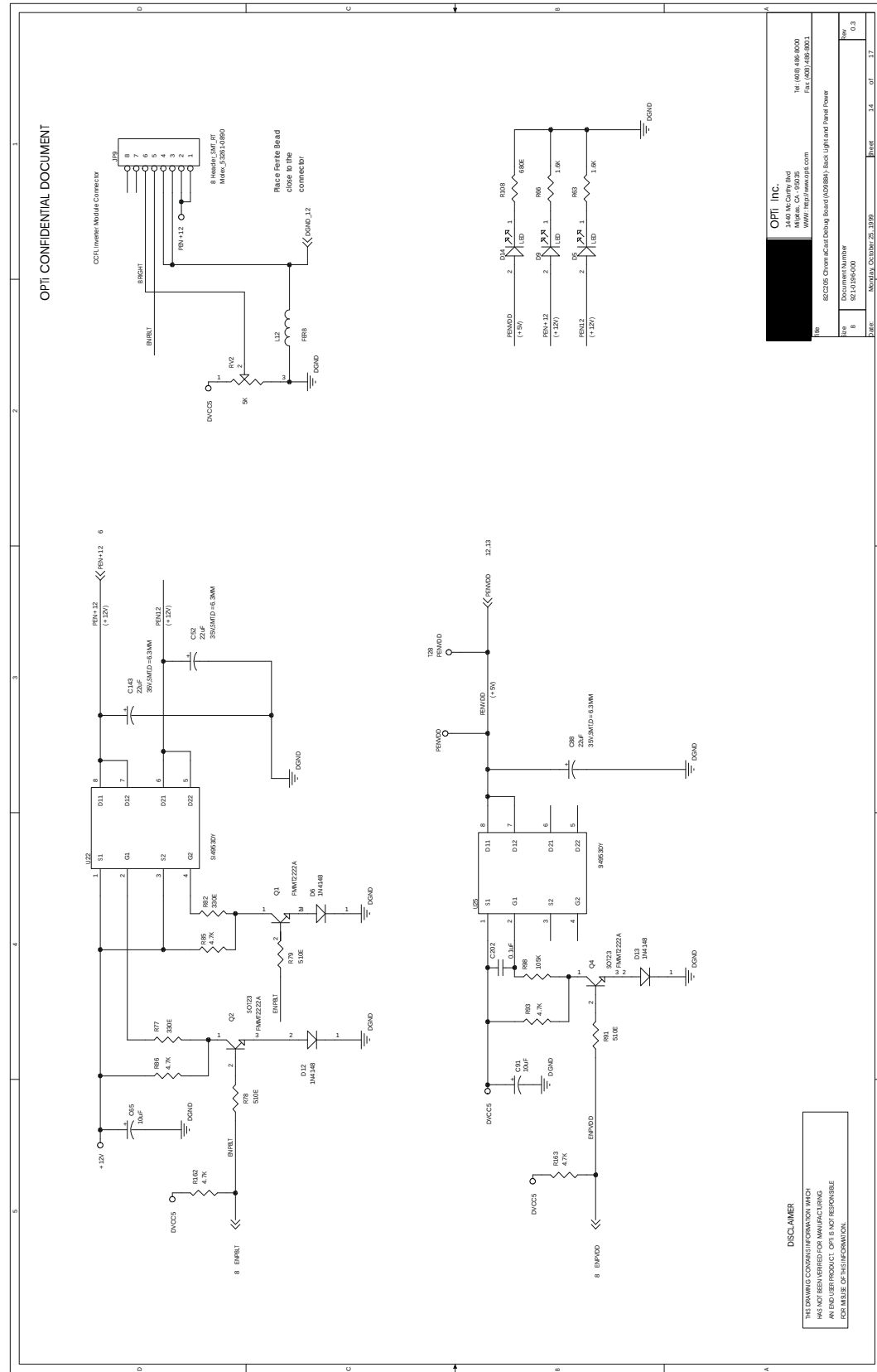




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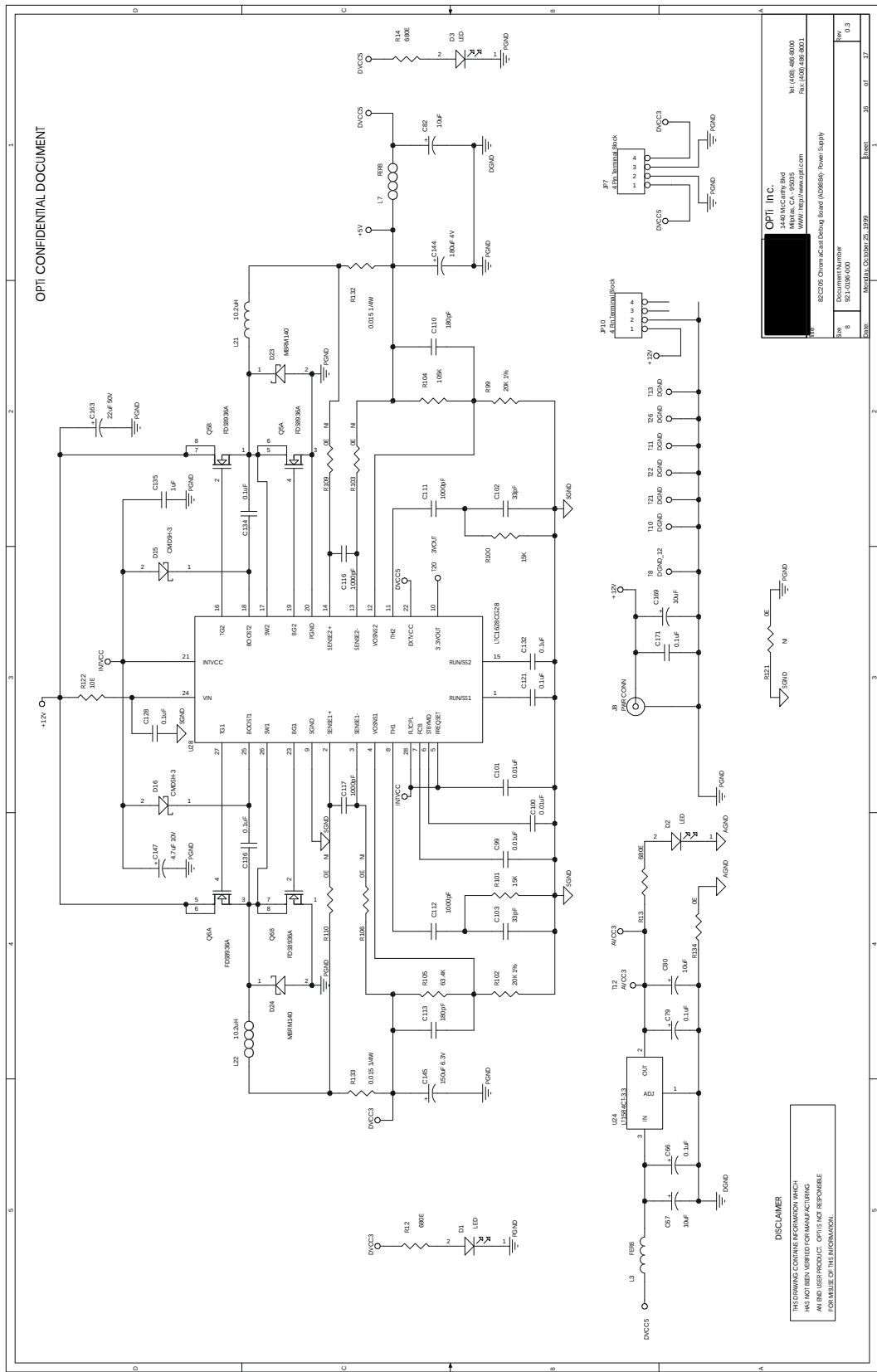






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