



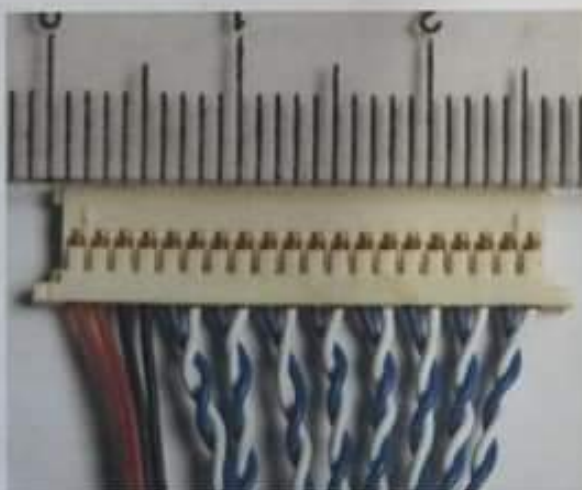
14P 1CH 6Bit 2



Connector type:DF19-14P

1-2:NC, 3:OClk+, 4:OClk-, 5:O2+, 6:O2-,
7:O1+, 8:O1-, 9:O0+, 10:O0-, 11-
12:GND, 13-14:VCC

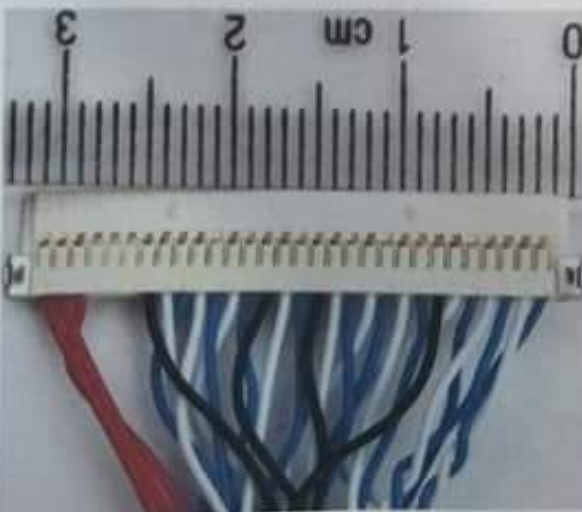
20P 2CH 6Bit 2



Connector type:DF19-20P

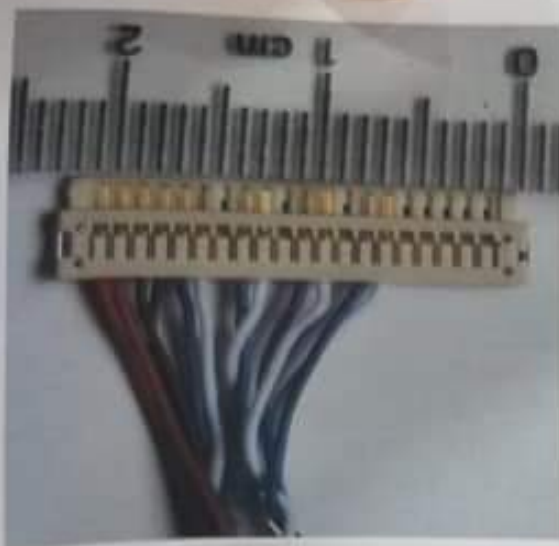
1-2:VCC, 3-4:GND, 5:O0-, 6:O0+,
7:O1-, 8:O1+, 9:O2-, 10:O2+, 11:OClk-,
12:OClk+, 13:E0-, 14:E0+, 15:E1-,
16:E1+, 17:E2-, 18:E2+, 19:ECIk-,
20:ECIk+

30P 2CH 8Bit 5



Connector type:DF19-30P

1-3:VCC, 4-6:NC, 7:GND, 8:E3+, 9:E3-,
10:ECIk+, 11:ECIk-, 12:E2+, 13:E2-,
14:GND, 15:E1+, 16:E1-, 17:GND,
18:E0+, 19:E0-, 20:O3+, 21:O3-,
22:OCIk+, 23:OCIk-, 24:GND, 25:O2+,
26:O2-, 27:O1+, 28:O1-, 29:O0+, 30:O0-



20PIN 1CH 6Bit 4

Connector type:FIX-20P

1-2:VCC, 3-4:GND, 5:O0-, 6:O0+, 7:NC,
8:O1-, 9:O1+, 10:NC, 11:O2-, 12:O2+,
13:NC, 14:OCIk-, 15:OCIk+, 16-20:NC



20PIN 1CH 6Bit 1

Connector type:DF19-20P

1-5:NC, 6:OCIk+, 7:OCIk-, 8:GND, 9:O2+,
10:O2-, 11:GND, 12:O1+, 13:O1-,
14:GND, 15:O0+, 16:O0-, 17-18:GND,
19-20:VCC



20P 1CH 8Bit 4

Connector type:DF19-20P

1-2:NC, 3:O3+, 4:O3-, 5:NC, 6:OCIk+,
7:OCIk-, 8:GND, 9:O2+, 10:O2-, 11:GND,
12:O1+, 13:O1-, 14:GND, 15:O0+,
16:O0-, 17-18:GND, 19-20:VCC



30P 2CH 6Bit 1

Connector type:FIX-30P

1-3:VCC, 4-7:NC, 8:O0-, 9:O0+, 10:GND, 11:O1-, 12:O1+, 13:NC, 14:O2-,
15:O2+, 16:GND, 17:OCIk-, 18:OCIk+, 19:NC, 20:E0-, 21:E0+, 22:NC,
23:E1-, 24:E1+, 25:GND, 26:E2-, 27:E2+, 28:GND, 29:EC-, 30:EC+



30P 2CH 8Bit 1

Connector type:FIX-30P

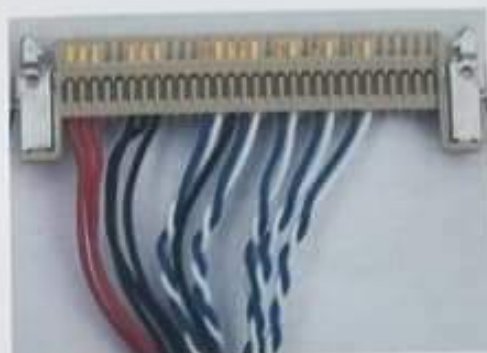
1:O0-, 2:O0+, 3:O1-, 4:O1+, 5:O2-, 6:O2+, 7:GND, 8:OCIk-, 9:OCIk+,
10:O3-, 11:O3+, 12:E0-, 13:E0+, 14:GND, 15:E1-, 16:E1+, 17:GND,
18:E2-, 19:E2+, 20:ECIk-, 21:ECIk+, 22:E3-, 23:E3+, 24:GND, 25-
27:NC, 28-30:VCC



30P 2CH 8Bit 14

Connector type:FIX-30P

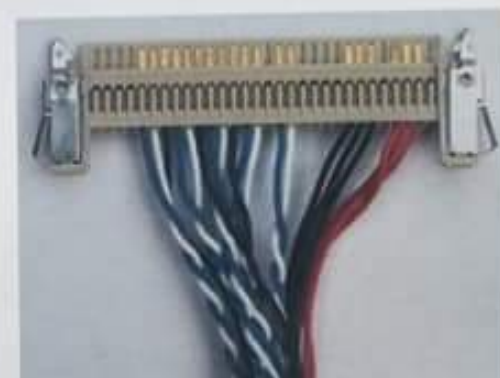
1-8:NC, 9:O0-, 10:O0+, 11:O1-, 12:O1+,
13:O2-, 14:O2+, 15:OCIk-, 16:OCIk+,
17:O3-, 18:O3+, 19:GND, 20:E0-,
21:E0+, 22:E1-, 23:E1+, 24:E2-, 25:E2+,
26:EC-, 27:EC+, 28:E3-, 29:E3+, 30:NC



30P 1CH 8Bit 3

Connector type: FIX-30P

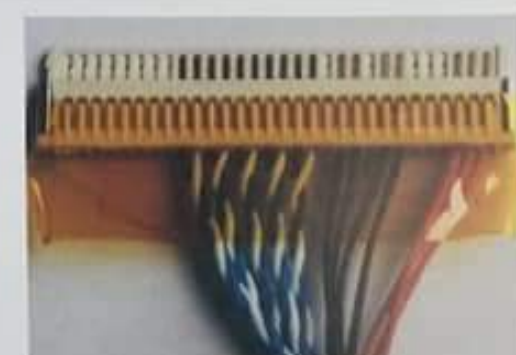
1-3:VCC, 4-5:NC, 6:GND, 7:NC, 8:GND, 9-11:NC, 12:O0-, 13:O0+,
14:GND, 15:O1-, 16:O1+, 17:GND, 18:O2-, 19:O2+, 20:NC, 21:OCIk-,
22:OCIk+, 23:NC, 24:O3-, 25:O3+, 26-30:NC



30P 1CH 8Bit 1

Connector type: FIX-30P

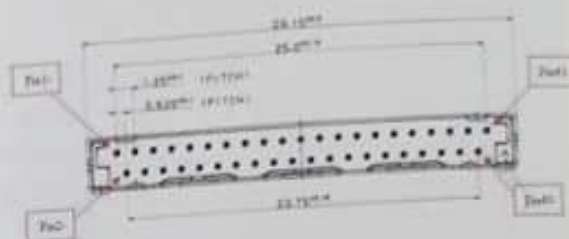
1-4:NC, 5:O0-, 6:O0+, 7:NC, 8:O1-, 9:O1+, 10:NC, 11:O2-, 12:O2+,
13:GND, 14:OCIk-, 15:OCIk+, 16:NC, 17:O3-, 18:O3+, 19-22:NC, 23-
25:GND, 26:NC, 27-29:VCC, 30:NC



30P 1CH 8Bit 6

Connector type: FIX-30P

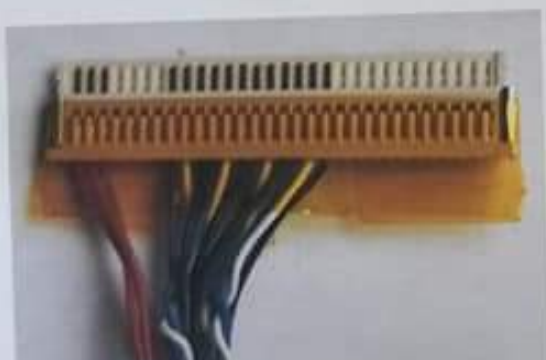
1-7:NC, 8:GND, 9:O0-, 10:O0+, 11:O1-, 12:O1+, 13:O2-, 14:O2+,
15:OCIk-, 16:OCIk+, 17:O3-, 18:O3+, 19:GND, 20-22:NC, 23-
25:GND, 26-27:NC, 28-30:VCC



41P 2CH 8Bit 1

Connector type: FI-WE41P-HF

1-3:NC, 4:GND, 5:O0-, 6:O0+, 7:O1-, 8:O1+, 9:O2-, 10:O2+, 11:GND, 12:OCik-, 13:OCik+, 14:O3-, 15:O3+, 16-17:NC, 18:GND, 19:E0-, 20:E0+, 21:E1-, 22:E1+, 23:E2-, 24:E2+, 25:GND, 26:ECik-, 27:ECik+, 28:E3-, 29:E3+, 30-34:NC, 35-36:GND, 37-38:NC, 39-



30P 1CH 6Bit 1

Connector type: FIX-30P

1-3:VCC, 4-7:NC, 8:O0-, 9:O0+, 10:GND, 11:O1-, 12:O1+, 13:GND, 14:O2-, 15:O2+, 16:GND, 17:OCik-, 18:OCik+, 19:GND, 20-30:NC



30P 1CH 8Bit 7

Connector type: FIX-30P

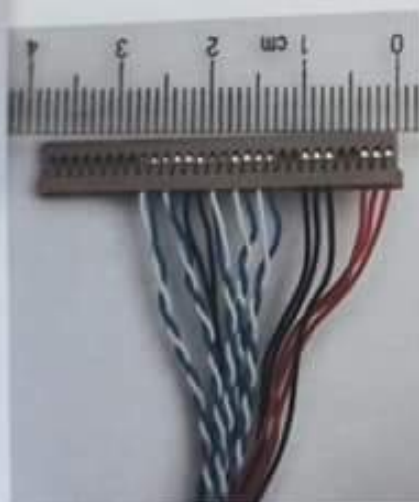
1:GND, 2-3:VCC, 4-7:NC, 8:O0-, 9:O0+, 10:GND, 11:O1-, 12:O1+, 13:GND, 14:O2-, 15:O2+, 16:GND, 17:OCik-, 18:OCik+, 19:GND, 20:O3-, 21:O3+, 22-30:NC



20P 2CH 6Bit 2

Connector type:DF14-20P

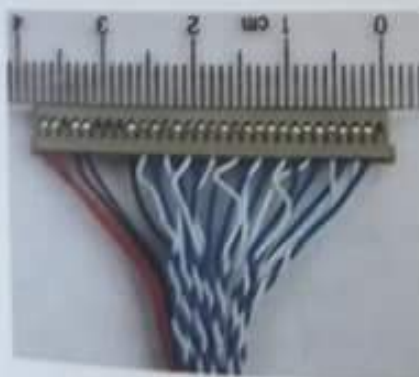
1-2:VCC, 3-4:GND, 5:O0-, 6:O0+, 7:O1-,
8:O1+, 9:O2-, 10:O2+, 11:OCIk-, 12:OCIk+,
13:E0-, 14:E0+, 15:E1-, 16:E1+, 17:E2-,
18:E2+, 19:ECIk-, 20:ECIk+



30P 1CH 8Bit 4

Connector type:DF14-30P

1-8:NC, 9:O3+, 10:O3-, 11:OCIk+, 12:OCIk-,
13:GND, 14:GND, 15:O2+, 16:O2-, 17:O1+,
18:O1-, 19:O0+, 20:O0-, 21-22:NC, 23-
25:GND, 26-27:NC, 28-30:VCC

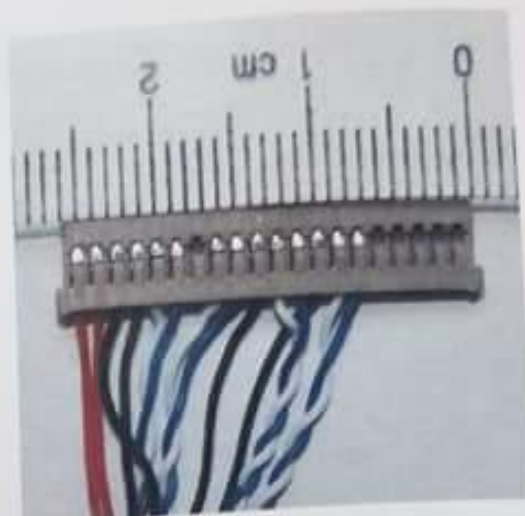


30P 2CH 8Bit 3

Connector type:DF14-30P

1-2:VCC, 3:NC, 4-5:GND, 6-8:NC, 9:GND, 10:E3+, 11:E3-, 12:ECIk+,
13:ECIk-, 14:E2+, 15:E2-, 16:E1+, 17:E1-, 18:E0+, 19:E0-, 20:O3+,
21:O3-, 22:OCIk+, 23:OCIk-, 24:O2+, 25:O2-, 26:O1+, 27:O1-,
28:O0+, 29:O0-, 30:NC

ND,
2+,
NC,



20PIN 1CH 6Bit 4

Connector type:DF14-20P

1-2:VCC, 3-4:GND, 5:O0-, 6:O0+, 7:NC, 8:O1-, 9:O1+, 10:GND, 11:O2-,
12:O2+, 13:GND, 14:OCIk-, 15:OCIk+, 16-20:NC



20PIN 1CH 6Bit 7

Connector type:DF14-20P

1-2:VCC, 3-4:GND, 5-7:NC, 8:O0-,
9:O0+, 10:GND, 11:O1-, 12:O1+,
13:GND, 14:O2-, 15:O2+, 16:NC,
17:OCIk-, 18:OCIk+, 19-20:NC



20P 1CH 8Bit 1

Connector type:DF14-20P

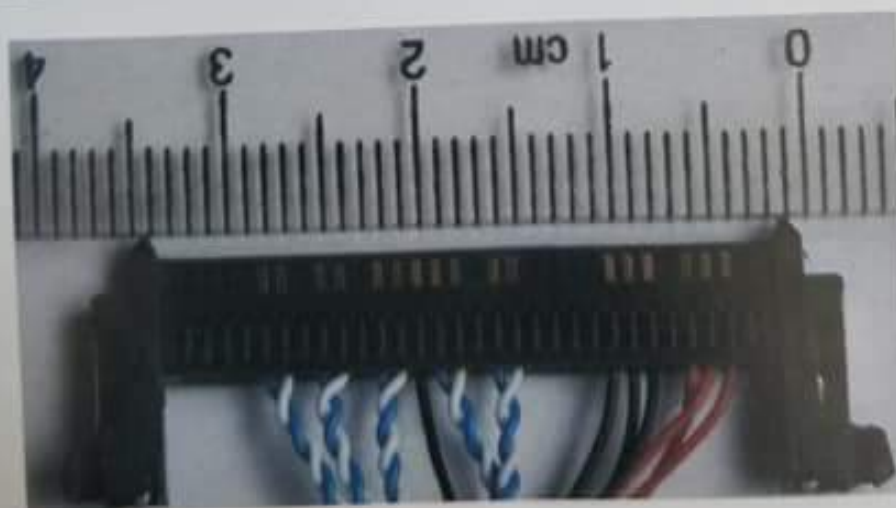
1-2:VCC, 3-4:GND, 5:O0-, 6:O0+, 7:GND,
8:O1-, 9:O1+, 10:GND, 11:O2-, 12:O2+,
13:GND, 14:OCIk-, 15:OCIk+, 16:NC,
17:O3-, 18:O3+, 19-20:NC



51P 2CH 8Bit 3

51PIN 2CH 8Bit 3# line for LCD model number

Connector type	Brand	Liquid display type
FI-RE51S-HF	SAMSUNG	LTA400HT-L03
		LTA400HA07
		LTA460HB07
		LTA520HB01-001
		LTA520HA02-001
	AU	T370HW02VB
		T370XW02-V1
	CMO	V400H1-L01
		V460H1-L01
		V520H1-L08



30P 2CH 8Bit 1

Connector type: FI-E30HL

1-4: NC, 5: O0-, 6: O0+, 7: NC, 8: O1-, 9: O1+, 10: NC, 11: O2-,
 12: O2+, 13: GND, 14: OC-, 15: OC+, 16: NC, 17: O3-, 18: O3+,
 19-22: NC, 23-25: GND, 26: NC, 27-29: VCC, 30: NC

Common wires diagram for LCD Panel and interface definition



51P 2CH 8Bit 2

51PIN 2CH 8Bit 2# line for LCD model number

Connector type	Brand	Liquid display type
FI-RE51S-HF	LG.PHILIP	LC320WX1-SLB1
		LC320WX5-SLC1
		LC370WX2-SLA1
		LC370WX4-SLE1
		LC370WUN-SAB1
		LC370WUE-SBA1-6R1
		LC420WUN-SAA1
		LC420WU5-SLA2
		LC420WU2-SLB1
		LC420WX4-SLB1
		LC420WUD-SAC1
		LC420WX7-SLE1
		LC420WUE-SAA1-VER1
		LC470WU1-SLA1
		LC470WUN-SAA1
		LC470WU1-SLA1
		LC470WU4-SLA1
		LC470WUD-SAC1
	AU	T420HW01-V2
		T420HW02-V4
	CMO	V420H1-LN1
		V420H1-L05
		V420H1-L07/11
		V470H1-L02
		V470H1-L03

51PIN 2CH 8Bit(3 version)
Connector type:FI-RE51G-HF

51P 2CH 8Bit 1										
PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O0-	O0+	O1-	O1+	O2-	O2+	GND	O Clk-	O Clk+
PIN	21	22	23	24	25	26	27	28	29	30
Function	GND	O3-	O3+	NC	NC	NC	8/10Bit	E0-	E0+	E1-
PIN	31	32	33	34	35	36	37	38	39	40
Function	E1+	E2-	E2+	GND	E Clk-	E Clk+	GND	E3-	E3+	NC
PIN	41	42	43	44	45	46	47	48	49	50
Function	NC	NC	NC	GND	GND	GND	NC	VCC	VCC	VCC
PIN	51									
Function	VCC									

51P 2CH 8Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	E0-	E0+	E1-	E1+	E2-	E2+	GND	E Clk-	E Clk+
PIN	21	22	23	24	25	26	27	28	29	30
Function	GND	E3-	E3+	NC	NC	NC	8/10Bit	O0+	O0+	O1-
PIN	31	32	33	34	35	36	37	38	39	40
Function	O1+	O2-	O2+	GND	O Clk-	O Clk+	GND	O3-	O3+	NC
PIN	41	42	43	44	45	46	47	48	49	50
Function	NC	NC	NC	GND	GND	GND	NC	VCC	VCC	VCC
PIN	51									
Function	VCC									

51P 2CH 8Bit 3

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	VCC	VCC	NC	GND	GND	GND	O0-
PIN	11	12	13	14	15	16	17	18	19	20
Function	O0+	O1-	O1+	O2-	O2+	GND	O Clk-	O Clk+	GND	O3-
PIN	21	22	23	24	25	26	27	28	29	30
Function	O3+	NC	NC	GND	E0-	E0+	E1-	E1+	E2-	E2+
PIN	31	32	33	34	35	36	37	38	39	40
Function	GND	E Clk-	E Clk+	GND	E3-	E3+	NC	NC	GND	NC
PIN	41	42	43	44	45	46	47	48	49	50
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PIN	51									
Function	NC									

30P 2CH 8Bit 13

LG PHILIPS part type: LM181E05-C3, LM181E05-C4M2, LM181E06-A4M1

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	VCC	GND	GND	E0-	E0+	E1-	E1+
PIN	11	12	13	14	15	16	17	18	19	20
Function	E2-	E2+	E Clk-	E Clk+	E3-	E3+	GND	GND	O0-	O0+
PIN	21	22	23	24	25	26	27	28	29	30
Function	O1-	O1+	O2-	O2+	O Clk-	O Clk+	O3-	O3+	GND	GND

30P 2CH 8Bit 14

PIN	1	2	3	4	5	6	7	8	9	10
Function	GND	NC	NC	NC	NC	NC	NC	GND	O0-	O0+
PIN	11	12	13	14	15	16	17	18	19	20
Function	O1-	O1+	O2-	O2+	O Clk-	O Clk+	O3-	O3+	GND	E0-
PIN	21	22	23	24	25	26	27	28	29	30
Function	E0+	E1-	E1+	E2-	E2+	E Clk-	E Clk+	E3-	E3+	GND

41PIN 2CH 8Bit(2 version)**41P 2CH 8Bit 1**

Connector type: FI-WE41P-HF

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	GND	O0-	O0+	O1-	O1+	O2-	O2+
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O Clk-	O Clk+	O3-	O3+	NC	NC	GND	E0-	E0+
PIN	21	22	23	24	25	26	27	28	29	30
Function	E1-	E1+	E2-	E2+	GND	E Clk-	E Clk+	E3-	E3+	NC
PIN	31	32	33	34	35	36	37	38	39	40
Function	NC	NC	NC	NC	GND	GND	GND	VCC	VCC	VCC
PIN	41									
Function	VCC									

41P 2CH 8Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	GND	O0-	O0+	O1-	O1+	O2-	O2+	GND	O Clk-	O Clk+
PIN	11	12	13	14	15	16	17	18	19	20
Function	O3-	O3+	GND	GND	GND	E0-	E0+	E1-	E1+	E2-
PIN	21	22	23	24	25	26	27	28	29	30
Function	E2+	GND	E Clk-	E Clk+	E3-	E3+	GND	GND	GND	NC
PIN	31	32	33	34	35	36	37	38	39	40
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PIN	41									
Function	NC									

30PIN 2CH 6Bit (14 version)

9	10
NC	NC
19	20
O2+	GND
29	30
NC	NC

30P 2CH 6Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	VCC	VCC	NC	NC	NC	NC	O0-	O0+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+	GND	E0-
PIN	21	22	23	24	25	26	27	28	29	30
Function	E0+	GND	E1-	E1+	GND	E2-	E2+	GND	E Clk-	E Clk+

30P 2CH 6Bit 2

Hannstar, IBM, IDTech, TOSHIBA display line

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	VCC	VCC	NC	NC	NC	NC	E0-	E0+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	E1-	E1+	GND	E2-	E2+	GND	E Clk-	E Clk+	GND	O0-
PIN	21	22	23	24	25	26	27	28	29	30
Function	O0+	GND	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+

30P 2CH 6Bit 3

15 inch part type display line: ITSX93C, ITSX93E

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	GND	GND	E0-	E0+	GND	E1-	E1+
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	E2-	E2+	GND	E Clk-	E Clk+	GND	O0-	O0+	GND
PIN	21	22	23	24	25	26	27	28	29	30
Function	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+	GND	NC

30PIN 2CH 8Bit (14 version)

30P 2CH 8Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	O0-	O0+	O1-	O1+	O2-	O2+	GND	O Clk-	O Clk+	O3-
PIN	11	12	13	14	15	16	17	18	19	20
Function	O3+	E0-	E0+	GND	E1-	E1+	GND	E2-	E2+	E Clk-
PIN	21	22	23	24	25	26	27	28	29	30
Function	E Clk+	E3-	E3+	GND	NC	NC	NC	VCC	VCC	VCC

30P 2CH 8Bit 2

17 inch CHIMEI, Acer, APAX part type display line: M170E6

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	GND	GND	GND	NC	NC	GND	O3+
PIN	11	12	13	14	15	16	17	18	19	20
Function	O3-	O Clk+	O Clk-	O2+	O2-	O1+	O1-	O0+	O0-	E3+
PIN	21	22	23	24	25	26	27	28	29	30
Function	E3-	E Clk+	E Clk-	E2+	E2-	E1+	E1-	E0+	E0-	GND

30P 1CH 8Bit 3

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	VCC	GND	NC	GND	GND	NC	NC
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O0-	O0+	GND	O1-	O1+	GND	O2-	O2+	GND
PIN	21	22	23	24	25	26	27	28	29	30
Function	O Clk-	O Clk+	GND	O3-	O3+	NC	NC	NC	NC	NC

30P 1CH 8Bit 4

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	NC	NC	NC	GND	O3+	O3-
PIN	11	12	13	14	15	16	17	18	19	20
Function	O Clk+	O Clk-	GND	GND	O2+	O2-	O1+	O1-	O0+	O0-
PIN	21	22	23	24	25	26	27	28	29	30
Function	GND	GND	GND	GND	GND	VCC	VCC	VCC	VCC	VCC

30P 1CH 8Bit 5

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	GND	GND	O0-	O0+	GND	O1-	O1+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O2-	O2+	GND	O Clk-	O Clk+	GND	O3-	O3+	NC	NC
PIN	21	22	23	24	25	26	27	28	29	30
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

30P 1CH 8Bit 6

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	NC	NC	NC	GND	O0-	O0+
PIN	11	12	13	14	15	16	17	18	19	20
Function	O1-	O1+	O2-	O2+	O Clk-	O Clk+	O3-	O3+	GND	NC
PIN	21	22	23	24	25	26	27	28	29	30
Function	NC	NC	NC	GND	GND	VCC	VCC	VCC	VCC	VCC

30P 1CH 8Bit 7

PIN	1	2	3	4	5	6	7	8	9	10
Function	GND	VCC	VCC	NC	NC	NC	NC	O0-	O0+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+	GND	O3-
PIN	21	22	23	24	25	26	27	28	29	30
Function	O3+	NC	NC	NC	NC	NC	NC	NC	NC	NC

30PIN 2CH 6

PIN	1
Function	NC
PIN	11
Function	O1-
PIN	21
Function	E0+

Hannstar, IB

PIN	1
Function	NC
PIN	11
Function	E1
PIN	21
Function	O1

15 inch pa

PIN	
Function	V
PIN	
Function	C
PIN	
Function	

30PIN :

PIN	
Function	
PIN	
Function	
PIN	
Function	

17inch

PIN	
Function	
PIN	
Function	
PIN	
Function	

20PIN 2CH 6Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	GND	GND	O0-	O0+	O1-	O1+	O2-	O2+
PIN	11	12	13	14	15	16	17	18	19	20
Function	O Clk-	O Clk+	E0-	E0+	E1-	E1+	E2-	E2+	E Clk-	E Clk+

21PIN 2CH 8Bit(1 version)

21P 2CH 8Bit 1

Connector type: FI-WE21P-HF

PIN	1	2	3	4	5	6	7	8	9	10
Function	O3+	O3-	O Clk+	O Clk-	O2+	O2-	O1+	O1-	O0+	O0-
PIN	11	12	13	14	15	16	17	18	19	20
Function	E3+	E3-	E Clk+	E Clk-	E2+	E2-	E1+	E1-	E0+	E0-
PIN	21									
Function	NC									

30PIN 1CH 6Bit(1 version)

30P 1CH 6Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	VCC	VCC	NC	NC	NC	NC	O0-	O0+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+	GND	NC
PIN	21	22	23	24	25	26	27	28	29	30
Function	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

30PIN 1CH 8Bit(7 version)

30P 1CH 8Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	GND	O0-	O0+	GND	O1-	O1+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O2-	O2+	GND	O Clk-	O Clk+	GND	O3-	O3+	GND	NC
PIN	21	22	23	24	25	26	27	28	29	30
Function	NC	NC	GND	GND	NC	VCC	VCC	VCC	VCC	NC

30P 1CH 8Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	VCC	VCC	GND	GND	O0-	O0+
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	GND	O1-	O1+	GND	GND	O2-	O2+	GND	GND
PIN	21	22	23	24	25	26	27	28	29	30
Function	O Clk-	O Clk+	GND	GND	O3-	O3+	GND	GND	NC	NC

Appendix 2: Normal use display line PIN definition and queue sequence

14PIN 1CH 6Bit(2 version)

14P 1CH 6Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	GND	GND	O0-	O0+	O1-	O1+	O2-	O2+
PIN	11	12	13	14						
Function	O Clk-	O Clk+	GND	GND						

14P 1CH 6Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	O Clk+	O Clk-	O2+	O2-	O1+	O1-	O0+	O0-
PIN	11	12	13	14						
Function	GND	GND	VCC	VCC						

20PIN 1CH 6Bit(7 version)

20PIN 1CH 6Bit 1

PIN	1	2	3	4	5	6	7	8	9	10
Function	NC	NC	NC	NC	GND	O Clk+	O Clk-	GND	O2+	O2-
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O1+	O1-	GND	O0+	O0-	GND	GND	VCC	VCC

20PIN 1CH 6Bit 2

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	VCC	GND	GND	GND	GND	O0-	O0+
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O1-	O1+	GND	O2-	O2+	GND	O Clk-	O Clk+	NC

20PIN 1CH 6Bit 3

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	VCC	GND	GND	O0-	O0+	GND	O1-	O1+
PIN	11	12	13	14	15	16	17	18	19	20
Function	GND	O2-	O2+	GND	O Clk-	O Clk+	GND	NC	NC	NC

20PIN 1CH 6Bit 4

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	GND	GND	O0-	O0+	GND	O1-	O1+	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O2-	O2+	GND	O Clk-	O Clk+	GND	NC	NC	NC	NC

20PIN 1CH 6Bit 5

PIN	1	2	3	4	5	6	7	8	9	10
Function	VCC	VCC	GND	GND	O2+	O2-	GND	O1+	O1-	GND
PIN	11	12	13	14	15	16	17	18	19	20
Function	O0+	O0-	GND	O Clk+	O Clk-	GND	NC	NC	NC	NC

Remark:

1CH 8Bit display line have 5 twist-pair line, 2CH 6Bit display line have 6 twist-pair line, 2CH 8Bit display line have 10 twist-pair line.

non-famous liquid decode board is simple, our master board have the same LVDS interface with non-famous liquid display, if display line power and GND is the same, you can connect and use.

2.4 No finished product LVDS display line, confirm liquid display's bit and interface definition

LVDS data and clock line is must contiguous, and there is 100ohm between this 2 lines, find the two lines and have 100ohm resistance, mark these pin and find the next one, LVDS display line only have 4 group(1CH 6Bit), 5 groups(1CH 8Bit), 8 groups(2CH 6Bit), 10 groups(2CH 8Bit) 4 types.

If you can't find supplier liquid display documents and also can't find the finishing good display line, you can try like this, most of liquid display(14.1inch, 15inch high resolution display, 17inch, 18.1inch square display) LVDS interface queue rules: the first data line(O0) is must the most outside group and the data invert input (O0-) is must the most outside that line; data line sequence(1CH 6Bit) must be: data O0 data O1 data O2 clock OC, total 2 sequence way. The right line array sequence should include one of two, if resolution, display supply voltage, display setting mode all is right, but still can't power on the display, you can try other way.

1CH 6Bit display line sequence: data O0 data O1 data O2 clock OC

	Data1	data2	data3	data4
①:	O0-, O0+;	O1-, O1+;	O2-, O2+;	OC-, OC+
②:	OC+, OC-;	O2+, O2-;	O1+, O1-;	O0+, O0-

1CH 8Bit display line sequence: data O0 data O1 data O2 clock OC data O3

	Data1	data2	data3	data4	data5
①:	O0-, O0+;	O1-, O1+;	O2-, O2+;	OC-, OC+	O3-, O3+
②:	O3+, O3-;	OC+, OC-;	O2+, O2-;	O1+, O1-;	O0+, O0-

2CH 6Bit display line sequence: data O0 data O1 data O2 clock OC
data E0 data E1 data E2 clock EC

	data1	data2	data3	data4
①:	O0-, O0+;	O1-, O1+;	O2-, O2+;	OC-, OC+
②:	EC+, EC-;	E2+, E2-;	E1+, E1-;	E0+, E0-;

	Data1	data2	data3	data4
①:	E0-, E0+;	E1-, E1+;	E2-, E2+;	EC-, EC+
②:	OC+, OC-;	O2+, O2-;	O1+, O1-;	O0+, O0-

LP141X3

LP141X3图片

上传面板照片，每张奖励5积分

LP141X3生产状况

客户发样

开始量产

最后下单

最后出货

当前生产状态：已停产

上传停产通知单，每个奖励10积分

LP141X3交易信息

现货数量：暂无

订购数量：暂无

供应商：暂无

订阅现货提醒

订阅求购提醒

加我为供应商

面板概况

详细参数

LG Electronics 品牌 LP141X3 主要参数

品牌

面板品牌：LG Electronics (LG Electronics)

面板型号：LP141X3

面板类型：3.5" TFT-LCD，液晶

面板尺寸：14.1 英寸

分辨率：1024(RGB)×768 (XGA)

显示模式：TN，常白显示，透射式

表面处理：雾面，Hard coating (3H)

面板亮度：130 cd/m² (Typ.)

对比度：150:1 (Typ.) (透射)

显示颜色：262K (6-bit)

响应时间：20/30 (Typ.)(Tr/Td) (ms)

可视角度：40/40/10/30 (Min.)(CR210) (左/右/上/下)

扫描频率：60Hz

光源类型：CCFL

信号接口：LVDS (1 ch, 6-bit)

面板电压：3.3V (Typ.)

RoHS：☒ 符合

Display LP141X3 main parameter can search by internet, base on above table, this display is 14.1inch, resolution is 1024X768, 1CH 6Bit LVDS, display power supply is 3.3V(this voltage is base on measure orignal display, different batch for display, maybe this voltage is different)

2.Liquid display with video decode board connector

Liquid and video decode board is the most difficult point in TV repair, the first step choice the LVDS display line, normally we use several type about LVDS display lines,suggest you can keep some LVDS display line as backup, it is not cost you so much money, maybe just less than 100RMB.

small size liquid display mostly use interface like 14pin,20 pin, 20 pitch,30pin and 30pitch, big size liquid display use 41pin,51pin.

base on liquid display LVDS interface size and searching signal interface, find a right display line to insert.

the method to confirm the display line as follows:

2.1 logical board power interface search

remove the liquid logical board protected metal cover, power connect with fuse, and is more than 2 line.

2.2 logical board GND interface search

GND connect with big area CU-foil, and also connect with liquid display metal cover, LVDS interface also have GND port.

2.3 logical board LVDS's data line and clock line searching

LVDS's data and clock line use blue and white twist-pair, single 6 display line have 4 group twist-pair, there is 100ohm between 2 twist-pair. if it match the rules, then LVDS line connecting is right.

NOVACOM NOVACOM NOVACOM

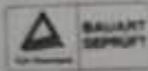
Above liquid display type: LQ121SILH03, LQ is coded for HARP, 121 mean 12.1 inch, other is produce serial number.

LP141X10 (A1M1)

US PATENT: 5,835,139



14121P1128704



LG.PHILIPS LCD



MADE IN KOREA

Above liquid display type: LP141X10, LP is coded for LG.PHILIPS, 141 mean 14.1 inch, other is produce serial number.

such as LP141X10, we can find the supplier technical documents, technical parameter as follows:



LG.PHILIPS LCD



LP141X10
Liquid Crystal Display

Product Specification

1. General Description

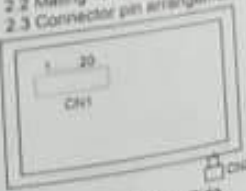
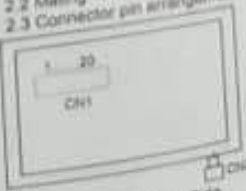
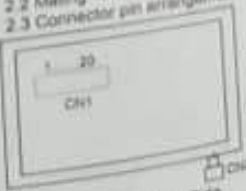
The LP141X10-A1P3 is a Color Active Matrix Liquid Crystal Display with an integral Cold Cathode Fluorescent Lamp(CCFL) backlight system. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally white mode. This TFT-LCD has 14.1 inches diagonally measured active display area with XGA resolution(768 vertical by 1024 horizontal pixel array). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 6-bit gray scale signal for each dot, thus, presenting a palette of more than 262,144 colors.

The LP141X10-A1P3 has been designed to apply the interface method that enables low power, high speed, low EMI. Flat Link must be used as a LVDS(Low Voltage Differential Signaling) chip.

The LP141X10-A1P3 is intended to support applications where thin thickness, low power are critical factors and graphic display are important. In combination with the vertical arrangement of the sub-pixels, the LP141X10-A1P3 characteristics provide an excellent flat display for office automation products such as Notebook PC.

we can find base on above words, the display is 14.1inch, Resolution 1024X768, LVDS interface is 1CH 6bit.

Table 2. MODULE CONNECTOR PIN CONFIGURATION(LVDS) [CN1]

Pin	Symbol	Description	Notes
1	Vcc	Power(3.3V)	1. Interface chips 1.1 LCD : LP24E10296L (Thin) (THC63LVDF44A core + Timing Controller) 1.2 System : THC63LVDM83A (Thin) *Pin to Pin compatible with TI LVDS
2	Vcc	Power(3.3V)	
3	GND	Ground	
4	GND	Ground	
5	A0M	Differential Signal	2. Connector 2.1 LCD : GT122-20P-213R (I-G Cable) 2.2 Mating : FI-5E20M-10P (JAE) or compatible 2.3 Connector pin arrangement
6	A0P	Differential Signal	
7	GND	Ground	
8	A1M	Differential Signal	
9	A1P	Differential Signal	
10	GND	Ground	
11	A2M	Differential Signal	
12	A2P	Differential Signal	
13	GND	Ground	Viewing on Display Side 
14	CLKM	Differential Signal	
15	CLKP	Differential Signal	
16	GND	Ground	
17	NC	No Connection	Viewing on Display Side 
18	NC	No connection	
19	GND	Ground	
20	GND	Ground	

1. recognize display type

when LCD TV have problem need to change mainboard, we must know the display resolution, display driver voltage and LVDS display line interface sequence, we only can search these parameter by display type. note: LCD TV type is no equal the LCD display type, the same brand, type TV may be have different display, so when we change mainboard we must recognize the display type.

liquid display type named follow this rule: company+size+produce serial number, normally mark on the back of display.

HITACHI
TX36D62VC1CAC
9022H 51929
REV **A** MADE IN JAPAN

高電圧注意
WARNING HIGH VOLTAGE



97 0P 00 9 A 29 346074

Above liquid display type: TX36D62VC1CAC, TX is coded for HITACHI, 36 mean the liquid display the diagonal line length, 36cm equal 14.1 inch, other is produce serial number.

SAMSUNG
ELECTRONICS

CH 

LTN141XU-L01
0039



3M0I34409C 003
MADE IN KOREA


RESPALDO DE CONFIANZA

Above liquid display type: LTN141XU-L01, LTN is coded for SAMSUNG, 141 mean 14.1 inch, other is produce serial number.

LQ121S1LH03 **SHARP**
MADE IN JAPAN



VF2007P01



8XW09380B