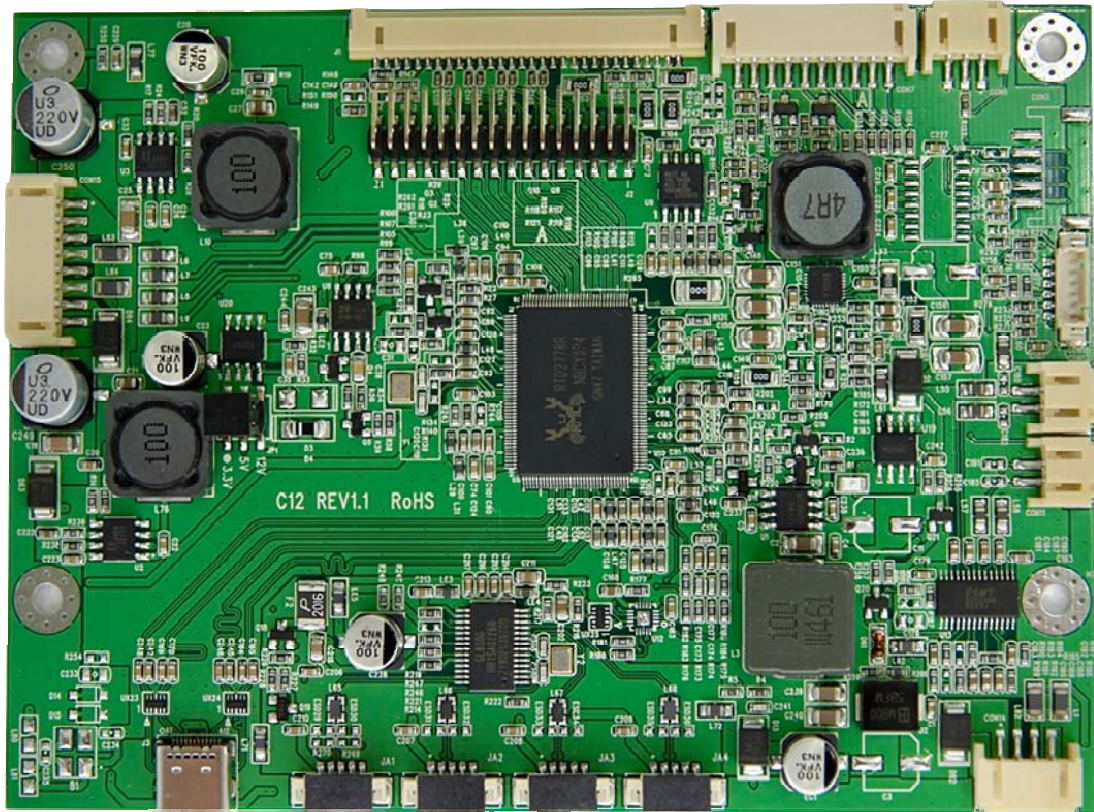


C12



A/D board option

Mode	Teleview part no.	Description
1	C12--778AC1--	USB Type C+USB2.0 HUB, audio

Features

- Compatible from 640x480 up to 1920x1200 resolution TFT LCD panel.
- Supply single pixel(24bits)or dual pixel(48bits) digital RGB output.
- Support Vertical refresh rate up to 75Hz for VGA~1920x1200 and 60Hz for higher resolution of VESA Standard Timing.
- Support USB type C input : PD+DP + USB 2.0 .
- Support Stereo Audio Amplifier function . 2Wx2 (option).
- Support Power Delivery (PD) Sink mode : 5V/3A, 9V/3A,15V/3A and 20V/3A .
- Support USB HUB output : USB 2.0x4 .
- RS232 support(option)
- DC 12V input(option) .
- Output: LVDS or eDP.
- Operating temperature : -30 °C to +80 °C.
- Storage temperature : -40 °C to +80 °C.
- RoHS compliant .

1. Support Timing Table

Mode	Resolution	V Freq.(Hz)
1	640*480	60/75
2	720*400	70
3	800*600	60/75
4	1024*768	60/75
5	1280*720	60
6	1280*1024	60/75
7	1360*768	60
8	1440*900	60
9	1680*1050	60
10	1920*1080	60
11	1920*1200	60

2. Connector Description

- Connector List

Connector	Function	Note
J1	LCD Panel for eDP	PH 1.25mm.30Pin.90°
J2	LCD Panel for LVDS	PH 2.0mm.32Pin.90°
J3	USB-C connector	24Pin.USB Type C
CON3	UART Connector	PH 2.0mm.5Pin.90°
CON6	IR Connector	PH 2.0mm. 3Pin.90°
CON7	Key pad connector	PH 2.0mm.10Pin.90°
CON10	ISP/ADC Connector	PH 1.25mm.6Pin.180°
CON11	Speaker R connector	PH 2.0mm. 2Pin.90°
CON13	Speaker L connector	PH 2.0mm. 2Pin.90°
CON14	Power input connector	PH 2.0mm.4Pin.90°
CON15	Backlight driver connector	PH 2.0mm.8Pin.90°
JA1~JA4	USB HUB 2.0 output	PH 1.25mm.5Pin.180°
JP1	3.3V/5V/ 12V selector	PH 2.0mm.2x3Pin.180°

Pin definition for connector

J1: Panel connector eDP (1.25 mm 30 Pin SMD) Option

Pin	Name	Note
1,2	NC	No contact
3	GND	Ground
4	TXAUXN R	Complement signal Auxiliary Channel
5	TXAUXP R	True signal Auxiliary Channel
6	GND	Ground
7	TX0N R	Complement signal link lane0
8	TX0P R	True signal link lane0
9	GND	Ground
10	TX1N R	Complement signal link lane1
11	TX1P R	True signal link lane1
12	GND	Ground
13	TX2N R	Complement signal link lane2
14	TX2P R	True signal link lane2
15	GND	Ground
16	TX3N R	Complement signal link lane3
17	TX3P R	True signal link lane3
18	GND	Ground
19,20	3.3V or 5V or 12V	3.3V/5V/12V Power supply for panel
21	DP_HPD	HPD Signal in
22	BKLT_EN	Backlight enable
23	BKLT_ADJ	Backlight Adjustment
24,25	GND	Ground
26,27,28,29	12V	+12V Power supply
30	NC	No contact

J2:Panel Connector LVDS(2.0 mm 32 Pin SMD)

Pin	Name (8 bit)	Note
1,2,3,4	VDD	Power supply for panel
5,6	GND	Ground
7	RXEIN3-	EvenTx3- Data Pin
8	RXEIN3+	EvenTx3+ Data Pin
9	RXEINC-	EvenTx- Clock Pin
10	RXEINC+	EvenTx+ Clock Pin
11	RXEIN2-	EvenTx2- Data Pin
12	RXEIN2+	EvenTx2+ Data Pin
13	RXEIN1-	EvenTx1- Data Pin
14	RXEIN1+	EvenTx1+ Data Pin
15	RXEIN0-	EvenTx0- Data Pin
16	RXEIN0+	EvenTx0+ Data Pin
17	RXOIN3-	OddTx3- Data Pin
18	RXOIN3+	OddTx3+ Data Pin
19	RXOINC-	OddTx- Clock Pin
20	RXOINC+	OddTx+ Clock Pin
21	RXOIN2-	OddTx2- Data Pin
22	RXOIN2+	OddTx2+ Data Pin
23	RXOIN1-	OddTx1- Data Pin
24	RXOIN1+	OddTx1+ Data Pin
25	RXOIN0-	OddTx0- Data Pin
26	RXOIN0+	OddTx0+ Data Pin
27,28,29,30	N.C.	Not connect
31,32	GND	Ground

J3: USB Input Connector (24Pin USB Type C SMD)

Pin	Function	Note
A1	GND	Ground
A2	TypeC_TX1+	SuperSpeed differential#1 TX +
A3	TypeC_TX1-	SuperSpeed differential#1 TX -
A4	TypeC_VBUS	VBUS
A5	TypeC_CC1_1	Configuration channel
A6	TypeC_D+	USB 2.0 differential position +
A7	TypeC_D-	USB 2.0 differential position -
A8	TypeC_SBU1_1	Sideband use (SBU)
A9	TypeC_VBUS	VBUS
A10	TypeC_RX2-	SuperSpeed differential#2 RX -
A11	TypeC_RX2+	SuperSpeed differential#2 RX +
A12	GND	Ground
B1	GND	Ground
B2	TypeC_TX2+	SuperSpeed differential#2 TX +
B3	TypeC_TX2-	SuperSpeed differential#2 TX -
B4	TypeC_VBUS	VBUS
B5	TypeC_CC2_1	Configuration channel
B6	TypeC_D+	USB 2.0 differential position +
B7	TypeC_D-	USB 2.0 differential position -
B8	TypeC_SBU2_1	Sideband use (SBU)
B9	TypeC_VBUS	VBUS
B10	TypeC_RX1-	SuperSpeed differential#1 RX -
B11	TypeC_RX1+	SuperSpeed differential#1 RX +
B12	GND	Ground

CON3: UART Connector (2.0 mm 5Pin SMD)

Pin	Description	Note
1	5V	+5Vdc
2	Key2	ADC Light Sensor option
3	Tx	UART TX
4	Rx	UART RX
5	GND	Ground

CON6 : IR Connector (2.0 mm 3Pin SMD)

Pin	Description	Note
1	5V	+5Vdc
2	IR	Interrupt input
3	GND	Ground

CON7: Key Board Connector (2.0 mm 10Pin SMD)

Pin	Function	Note
1	SEL+(RIGHT)	Increase the value
2	SEL-(LEFT)	Decrease the value
3	AUTO	Menu Exit
4	MENU	Enter the main menu
5	POWER	Power ON/OFF
6	LED-G	Green LED (Power ON)
7	LED-R	Red LED (Power saving)
8	GND	Ground
9	N.C.	Not connect
10	N.C.	Not connect

CON10: ISP/ADC Connector (1.25mm 6Pin SMD)

Pin	Description	Note
1	3.3V	+3.3Vdc
2	ADC_1	Detect pin1
3	ADC_2	Detect pin2
4	DDCSDA	ISP IIC Data
5	DDCSCL	ISP IIC Clock
6	GND	Ground

CON11: Speaker Connector (2.0 mm 2Pin SMD)

Pin	Description	Note
1	R-	Audio Right-
2	R+	Audio Right+

CON13: Speaker Connector (2.0 mm 2Pin SMD)

Pin	Description	Note
1	L-	Audio Left-
2	L+	Audio Left+

CON14: Power input connector (2.0mm 4Pin SMD)

Pin	Description	Note
1,4	+12V	Power supply of +12Vdc
2,3	GND	Ground

CON15: Backlight Driver Connector (2.0mm8 Pin SMD)

Pin	Function	Note
1,2	12V Input	Power supply of +12Vdc
4,6	GND	Ground
3	Brightness control	PWM
5	ON/OFF Control	5V ON;0V OFF
7,8	5V Input/Output	+5Vdc

Note : 2.0mm 5 pin connector(Pin1~5) is used for standard 12V input
And stand alone backlight driver .

2.0mm 3 pin connector (Pin6~8) is used for 2-in-1 power supply
with 5V input .

JA1~JA4: USB Output Connector (1.25 mm 5Pin SMD)

Pin	Function	Note
1	5V	HUB5V
2	DATA-	USB DATA-
3	DATA+	USB DATA+
4	GND	Ground
5	GND_EARTH	Ground

JP1:Panel power 3.3V / 5V / 12V selector (2.0 mm 2*3Pin SMD)

Pin	Description	Note
1 - 2	3.3V	Power supply of +3.3Vdc
3 - 4	5V	Power supply of +5dc
5 - 6	12V	Power supply of +12Vdc

