

Product Data and Specifications



January 15, 2014

49-1228-00

Timing Translator Board

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49-1228-00

PRODUCT DATA AND SPECIFICATIONS

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REVISION RECORD

January 15, 2014	Initial release

GENERAL SPECIFICATIONS

This product is a video timing translator board and accessories for converting video interface data between IGT® player tracking CPU and KOE's TX16D20* series displays.

Part Number	49-1228-00
Video Interface	6bit CMOS
Power supply	
Display Driver (V_{DD})	3.3V
Backlight Driver (V_{BL})	5V

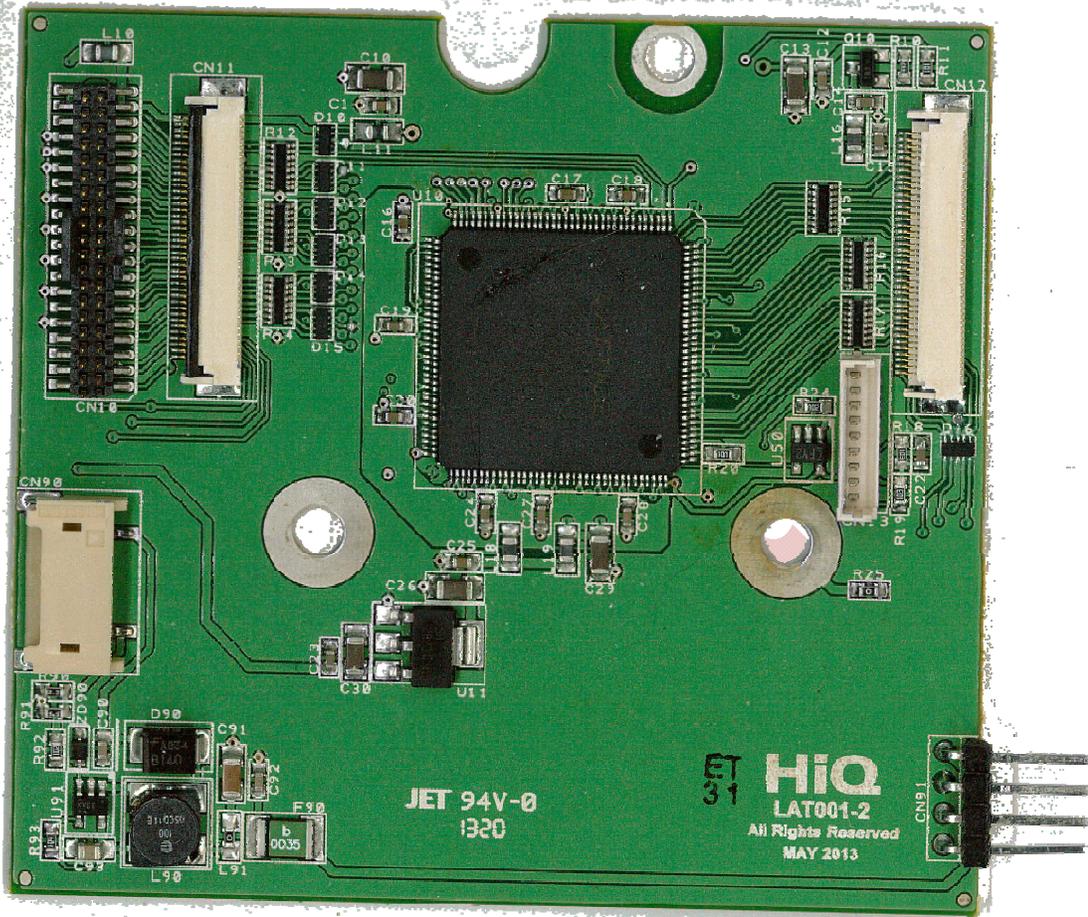
RECOMMENDED OPERATING CONDITIONS

Parameter	Min	Nom	Max
$V_{in(DD)}$ (V)	3.2	3.3	3.4
$V_{in(BL)}$ (V)	4.5	5.0	5.5

ABSOLUTE MAXIMUM RATINGS

Parameter	Min	Max
$V_{in(DD)}$ (V)	-0.3	3.75
$V_{in(BL)}$ (V)	-0.3	6.0
$V_{in(Logic)}$ (V)	-0.3	3.75
Storage Temperature °C	-30	+80
Operating Temperature °C	-20	+70

TRANSLATOR BOARD (LAT001-2)



CPU INTERFACE (CN11) & DISPLAY INTERFACE (CN12)

Part Number	Mating Connector
XF2M-4015-1A	40 pin FFC From CPU & 40 pin FFC to Display

BACKLIGHT INTERFACE (CN91)

Part Number	Mating Connector	Manufacturer
22-28-8041	From Display	Molex Inc

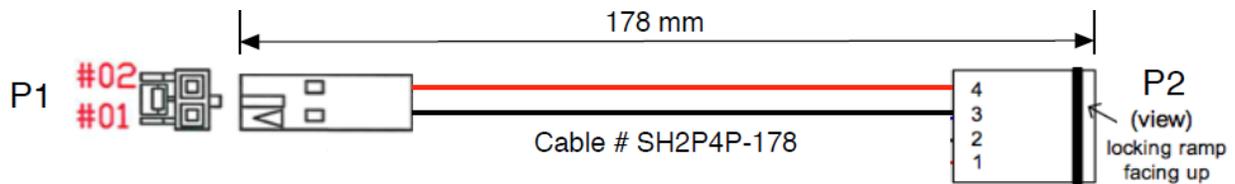
Pin 1	5V	5V Backlight Supply	Pin 3	N/C	Not Used
Pin 2	GND	Backlight Ground	Pin 4	N/C	Not Used

VIDEO INTERFACE (CN10)

Part Number	Mating Connector	Manufacturer
FTSH-120-01-F-DV-K	FFSD-20	Samtec Inc.

Pin 1	Y2	Touch Bottom	Pin 21	G5	Green 5
Pin 2	X2	Touch Right	Pin 22	GND	Display Ground
Pin 3	Y1	Touch Top	Pin 23	B0	Blue 0
Pin 4	X1	Touch Left	Pin 24	B1	Blue 1
Pin 5	GND	Display Ground	Pin 25	B2	Blue 2
Pin 6	N/C	Not Used	Pin 26	GND	Display Ground
Pin 7	R0	Red 0	Pin 27	B3	Blue 3
Pin 8	R1	Red 1	Pin 28	B4	Blue 4
Pin 9	R2	Red 2	Pin 29	B5	Blue 5
Pin 10	GND	Display Ground	Pin 30	GND	Display Ground
Pin 11	R3	Red 3	Pin 31	VSYNC	Not Used
Pin 12	R4	Red 4	Pin 32	GND	Display Ground
Pin 13	R5	Red 5	Pin 33	DCLK	DCLK
Pin 14	GND	Display Ground	Pin 34	GND	Display Ground
Pin 15	G0	Green 0	Pin 35	MDISP	MDISP
Pin 16	G1	Green 1	Pin 36	HSYNC	Not Used
Pin 17	G2	Green 2	Pin 37	3V3	Display Power
Pin 18	GND	Display Ground	Pin 38	3V3	Display Power
Pin 19	G3	Green 3	Pin 39	3V3	Display Power
Pin 20	G4	Green 4	Pin 40	3V3	Display Power

BACKLIGHT INTERFACE CABLE (FOR CN91)



PRECAUTIONS AND WARNINGS

1. STRESSES ABOVE THOSE LISTED UNDER “ABSOLUTE MAXIMUM RATINGS” MAY CAUSE PERMANENT DAMAGE TO THE DEVICE. THIS IS A STRESS RATING ONLY AND FUNCTIONAL OPERATION OF THE DEVICE AT THESE OR ANY OTHER CONDITIONS ABOVE THOSE INDICATED IN THE OPERATIONAL SECTION OF THIS SPECIFICATION IS NOT IMPLIED. EXPOSURE TO ABSOLUTE MAXIMUM RATING CONDITIONS FOR EXTENDED PERIODS MAY AFFECT DEVICE RELIABILITY. ABSOLUTE MAXIMUM RATINGS APPLY INDIVIDUALLY ONLY, NOT IN COMBINATION.
2. ESD: THIS DEVICE IS SENSITIVE TO ELECTRO-STATIC DISCHARGE. PROPER HANDING AND ANTI-STATIC PRECAUTIONS SHOULD BE IMPLEMENTED BEFORE OPENING THE DELIVERY PACKAGE.
3. STORAGE: STORE AWAY FROM LIGHT AND MAINTAIN -30°C TO 80°C AT 55%–75% HUMIDITY WHEN STORING FOR EXTENDED PERIODS OR PRODUCT DEGRADATION MAY OCCUR.
4. IMPACT, VIBRATION AND DROP HAS NOT BEEN RATED DUE TO THE VARIOUS CONFIGURATIONS AND THE STRONG DEPENDENCE ON MOUNTING SCHEMES. CONTACT AN APPLICATION ENGINEER FOR SPECIFIC APPLICATION PROPERTIES.
5. COMPONENTS OF THIS PRODUCT WHICH MAY NOT AFFECT ELECTRICAL PERFORMANCE ARE SUBJECT TO CHANGE WITHOUT NOTICE DUE TO AVAILABILITY.
6. SUZO-HAPP GROUP PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES¹ OR SYSTEMS² WITHOUT THE EXPRESS WRITTEN APPROVAL OF SUZO-HAPP GROUP
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1 LIFE SUPPORT DEVICES OR SYSTEMS ARE DEVICES OR SYSTEMS WHICH, (A) ARE INTENDED FOR SURGICAL IMPLANT INTO THE BODY, OR (B) SUPPORT OR SUSTAIN LIFE, OR (C) WHOSE FAILURE TO PERFORM WHEN PROPERLY USED IN ACCORDANCE WITH INSTRUCTIONS FOR USE PROVIDED IN THE LABELING, CAN BE REASONABLY EXPECTED TO RESULT IN SIGNIFICANT INJURY TO THE USER.

2 A CRITICAL COMPONENT IS ANY COMPONENT OF A LIFE SUPPORT DEVICE OR SYSTEM WHOSE FAILURE TO PERFORM CAN BE REASONABLY EXPECTED TO CAUSE THE FAILURE OF THE LIFE SUPPORT DEVICE OR SYSTEM, OR TO AFFECT ITS SAFETY OR EFFECTIVENESS.