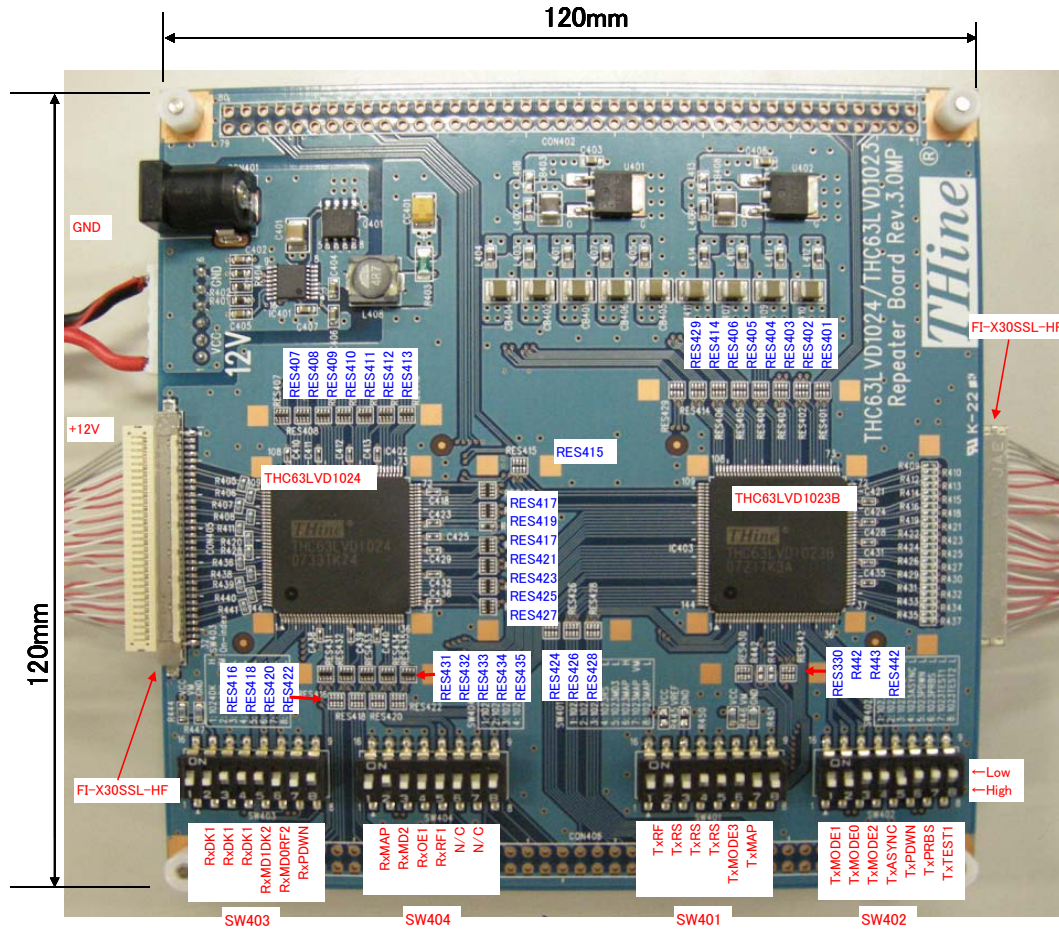
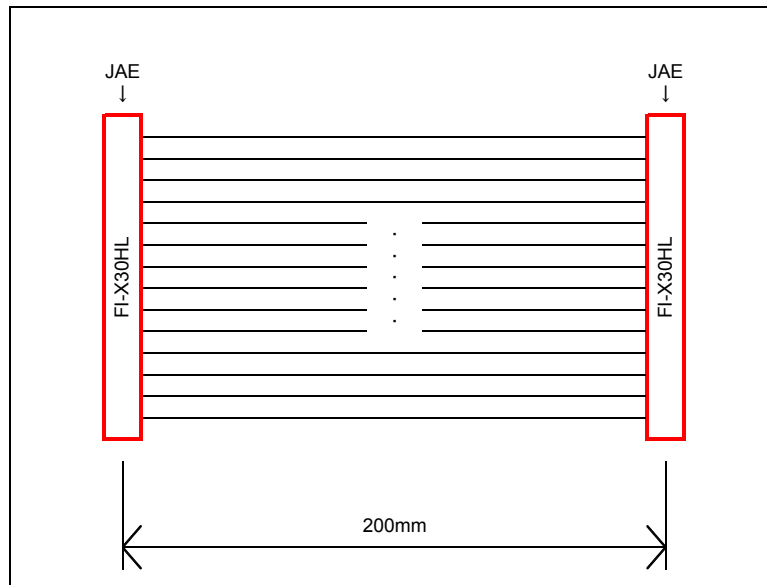


Description

t=1.6mm



LVDS-Cable Type.



**SW401 Setting**

\* Def. : Default Setting

SW Pin#	* Def.	NodeName	THC63LVD1023B																													
			IC Pin#	PinName	Description																											
1	H	TxRF	21	R/F	Input Clock Triggering Edge Select. H : Rising edge, L : Falling edge																											
2	L	TxRS	22	RS	LVDS swing mode, VREF select.  <table border="1"> <thead> <tr> <th colspan="3">SW-Pin#</th> <th rowspan="2">RS</th> <th rowspan="2">LVDS Swing</th> <th rowspan="2">Small Swing Input Support</th> </tr> <tr> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>H(open)</td> <td>H(open)</td> <td>VIHM</td> <td>350mV</td> <td>N/A</td> </tr> <tr> <td>H(open)</td> <td>L</td> <td>H(open)</td> <td>VIMM</td> <td>350mV</td> <td>RS=VREFa</td> </tr> <tr> <td>H(open)</td> <td>H(open)</td> <td>L</td> <td>VILM</td> <td>200mV</td> <td>N/A</td> </tr> </tbody> </table> a) VREF is Input Reference Voltage.	SW-Pin#			RS	LVDS Swing	Small Swing Input Support	2	3	4	L	H(open)	H(open)	VIHM	350mV	N/A	H(open)	L	H(open)	VIMM	350mV	RS=VREFa	H(open)	H(open)	L	VILM	200mV	N/A
SW-Pin#						RS	LVDS Swing	Small Swing Input Support																								
2	3								4																							
L	H(open)	H(open)	VIHM	350mV	N/A																											
H(open)	L	H(open)	VIMM	350mV	RS=VREFa																											
H(open)	H(open)	L	VILM	200mV	N/A																											
3	H																															
4	H																															
5	L	TxMODE3	23	MODE3	Input port switching function enable when MODE<1:0>=HL(Single-in/Dual-out Mode). H or Open: Port switch disable. L: Port switch enable.																											
6	L	TxMAP	24	MAP	LVDS mapping table select.  <table border="1"> <thead> <tr> <th colspan="3">SW-Pin#</th> <th rowspan="2">RS</th> <th rowspan="2">Mapping Mode</th> </tr> <tr> <th>6</th> <th>7</th> <th>8</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>H(open)</td> <td>H(open)</td> <td>VIHM</td> <td>Mapping MODE1</td> </tr> <tr> <td>H(open)</td> <td>L</td> <td>H(open)</td> <td>VIMM</td> <td>Mapping MODE2</td> </tr> <tr> <td>H(open)</td> <td>H(open)</td> <td>L</td> <td>VILM</td> <td>Mapping MODE3</td> </tr> </tbody> </table>	SW-Pin#			RS	Mapping Mode	6	7	8	L	H(open)	H(open)	VIHM	Mapping MODE1	H(open)	L	H(open)	VIMM	Mapping MODE2	H(open)	H(open)	L	VILM	Mapping MODE3				
SW-Pin#						RS	Mapping Mode																									
6	7							8																								
L	H(open)	H(open)	VIHM	Mapping MODE1																												
H(open)	L	H(open)	VIMM	Mapping MODE2																												
H(open)	H(open)	L	VILM	Mapping MODE3																												
7	H																															
8	H																															

**SW402 Setting**

\* Def. : Default Setting

SW Pin#	* Def.	NodeName	THC63LVD1023B																	
			IC Pin#	PinName	Description															
1	H	TxMODE1	25	MODE1	Pixel Data Mode.  <table border="1"> <thead> <tr> <th>MODE1</th> <th>MODE0</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>Single Link(Single-in/Single-out)</td> </tr> <tr> <td>H</td> <td>L</td> <td>Single Link(Single-in/Dual-out)</td> </tr> <tr> <td>L</td> <td>H</td> <td>Dual Link(Dual-in/Single-out)</td> </tr> <tr> <td>L</td> <td>L</td> <td>Dual Link(Dual-in/Single-out)</td> </tr> </tbody> </table>	MODE1	MODE0	Mode	H	H	Single Link(Single-in/Single-out)	H	L	Single Link(Single-in/Dual-out)	L	H	Dual Link(Dual-in/Single-out)	L	L	Dual Link(Dual-in/Single-out)
MODE1	MODE0	Mode																		
H	H	Single Link(Single-in/Single-out)																		
H	L	Single Link(Single-in/Dual-out)																		
L	H	Dual Link(Dual-in/Single-out)																		
L	L	Dual Link(Dual-in/Single-out)																		
2	H	TxMODE0	26	MODE0																
3	L	TxMODE2	27	MODE2																
4	L	TxASYNC	28	ASYNC																
5	H	TxPDWN	30	/PDWN	H: Normal operation, L: Power down (all outputs are Hi-Z)															
6	L	TxPRBS	31	PRBS	PRBS(Pseudo-Random Binary Sequence) generator is active in order to evaluate eye patterns when MODE<1:0> = LL(Dual-in/Dual-out mode) or ASYNC=H H: PRBS generator is enable. L: Normal Operation															
7	L	TxTEST1	32	Reserved	Must be tied to GND.															
8	H	TxTEST2	33	N/C	Must be Open.															

**SW403 Setting**

\* Def. : Default Setting

THC63LVD1024																																									
SW Pin#	* Def.	NodeName	IC Pin#	PinName	Description																																				
1	H	RxDK1	7	DK	Output Clock Delay Timing Select. tDOUT=Output Data Cycle																																				
2	H				<table border="1"> <thead> <tr> <th rowspan="2">MODE[1:0]</th> <th colspan="3">SW-Pin#</th> <th rowspan="2">Offset[nsec]</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>LL</td> <td>L</td> <td>H(open)</td> <td>H(open)</td> <td><math>6 \frac{tDOUT}{28}</math></td> </tr> <tr> <td>HH</td> <td>H(open)</td> <td>L</td> <td>H(open)</td> <td><math>-6 \frac{tDOUT}{28}</math></td> </tr> <tr> <td>HL</td> <td>H(open)</td> <td>H(open)</td> <td>L</td> <td>0</td> </tr> <tr> <td rowspan="3">LH</td> <td>L</td> <td>H(open)</td> <td>H(open)</td> <td><math>7 \frac{tDOUT}{28}</math></td> </tr> <tr> <td>H(open)</td> <td>L</td> <td>H(open)</td> <td><math>-7 \frac{tDOUT}{28}</math></td> </tr> <tr> <td>H(open)</td> <td>H(open)</td> <td>L</td> <td>0</td> </tr> </tbody> </table>	MODE[1:0]	SW-Pin#			Offset[nsec]	1	2	3	LL	L	H(open)	H(open)	$6 \frac{tDOUT}{28}$	HH	H(open)	L	H(open)	$-6 \frac{tDOUT}{28}$	HL	H(open)	H(open)	L	0	LH	L	H(open)	H(open)	$7 \frac{tDOUT}{28}$	H(open)	L	H(open)	$-7 \frac{tDOUT}{28}$	H(open)	H(open)	L	0
MODE[1:0]	SW-Pin#						Offset[nsec]																																		
	1	2	3																																						
LL	L	H(open)	H(open)	$6 \frac{tDOUT}{28}$																																					
HH	H(open)	L	H(open)	$-6 \frac{tDOUT}{28}$																																					
HL	H(open)	H(open)	L	0																																					
LH	L	H(open)	H(open)	$7 \frac{tDOUT}{28}$																																					
	H(open)	L	H(open)	$-7 \frac{tDOUT}{28}$																																					
	H(open)	H(open)	L	0																																					
3	L																																								
4	L	RxMD1DK2	6	MODE1	Pixel Data Mode.																																				
5	L	RxMD0RF2	5	MODE0																																					
					<table border="1"> <thead> <tr> <th>MODE1</th> <th>MODE0</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>Single Link(Single-in/Single-out)</td> </tr> <tr> <td>H</td> <td>L</td> <td>Single Link(Single-in/Dual-out)</td> </tr> <tr> <td>L</td> <td>H</td> <td>Dual Link(Dual-in/Single-out)</td> </tr> <tr> <td>L</td> <td>L</td> <td>Dual Link(Dual-in/Single-out)</td> </tr> </tbody> </table>	MODE1	MODE0	Mode	H	H	Single Link(Single-in/Single-out)	H	L	Single Link(Single-in/Dual-out)	L	H	Dual Link(Dual-in/Single-out)	L	L	Dual Link(Dual-in/Single-out)																					
MODE1	MODE0	Mode																																							
H	H	Single Link(Single-in/Single-out)																																							
H	L	Single Link(Single-in/Dual-out)																																							
L	H	Dual Link(Dual-in/Single-out)																																							
L	L	Dual Link(Dual-in/Single-out)																																							
6	H	RxPDWN	4	/PDWN	Power down and Output Control. H : Normal operation L : Power down																																				
7	H	RxOE2	3	Reserved	Must be tied to VCC.																																				
8	L	RxTEST	144	LGND	Ground Pins for LVDS inputs.																																				

**SW404 Setting**

\* Def. : Default Setting

THC63LVD1024																
SW Pin#	* Def.	NodeName	IC Pin#	PinName	Description											
1	H	RxMAP	11	MAP	LVDS mapping table select. H : Mapping Mode1 L : Mapping Mode2											
2	L	RxMD2	10	MODE2	DDR function enable.											
					<table border="1"> <thead> <tr> <th>MODE&lt;1:0&gt;</th> <th>MODE2</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td rowspan="2">LH</td> <td>H</td> <td>DDR (Double Edge Output) function enable.</td> </tr> <tr> <td>L</td> <td>DDR (Double Edge Output) function disable.</td> </tr> <tr> <td>LL HL HH</td> <td>L</td> <td>Must be tied to GND</td> </tr> </tbody> </table>	MODE<1:0>	MODE2	Mode	LH	H	DDR (Double Edge Output) function enable.	L	DDR (Double Edge Output) function disable.	LL HL HH	L	Must be tied to GND
MODE<1:0>	MODE2	Mode														
LH	H	DDR (Double Edge Output) function enable.														
	L	DDR (Double Edge Output) function disable.														
LL HL HH	L	Must be tied to GND														
3	H	RxOE1	9	OE	Output Enable. H : Output enable, L : Output disable											
4	H	RxRF1	8	R/F	Output Clock Triggering Edge Select. H : Rising edge. L : Falling edge.											
5	H	N/C	-	-	Non Connected											
6	H	N/C														
7	H	N/C														
8	H	N/C														

**Measures Type**

#	Type	Un-Mount	0Ω-Mount	33Ω-Mount
1		RES401 RES420 RES402 RES422 RES403 RES424 RES404 RES426 RES405 RES428 RES406 RES429 RES414 RES430 RES415 RES442 RES416 R442 RES418 R443		RES407 RES423 RES408 RES425 RES409 RES427 RES410 RES431 RES411 RES432 RES412 RES433 RES413 RES434 RES417 RES435 RES419 R417 RES421
2			RES401 RES420 RES402 RES422 RES403 RES424 RES404 RES426 RES405 RES428 RES406 RES429 RES414 RES430 RES415 RES442 RES416 R442 RES418 R443	RES407 RES423 RES408 RES425 RES409 RES427 RES410 RES431 RES411 RES432 RES412 RES433 RES413 RES434 RES417 RES435 RES419 R417 RES421
3		THC63LVD1023B	RES401 RES420 RES402 RES422 RES403 RES424 RES404 RES426 RES405 RES428 RES406 RES429 RES414 RES430 RES415 RES442 RES416 R442 RES418 R443	RES407 RES423 RES408 RES425 RES409 RES427 RES410 RES431 RES411 RES432 RES412 RES433 RES413 RES434 RES417 RES435 RES419 R417 RES421
4		RES407 RES423 RES408 RES425 RES409 RES427 RES410 RES431 RES411 RES432 RES412 RES433 RES413 RES434 RES417 RES435 RES419 R417 RES421	RES401 RES420 RES402 RES422 RES403 RES424 RES404 RES426 RES405 RES428 RES406 RES429 RES414 RES430 RES415 RES442 RES416 R442 RES418 R443	

## **Notices and Requests**

1. The product specifications described in this material are subject to change without prior notice.
2. The circuit diagrams described in this material are examples of the application which may not always apply to the customer's design. We are not responsible for possible errors and omissions in this material. Please note if errors or omissions should be found in this material, we may not be able to correct them.
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6. Despite our utmost efforts to improve the quality and reliability of the product, faults will occur with a certain small probability, which is inevitable to a semi-conductor product. Therefore, you are encouraged to have sufficient redundant or error preventive design applied to the use of the product so as not to have our product cause any social or public damage.
7. Please note that this product is not designed to be radiation-proof.
8. Customers are asked, if required, to judge by themselves if this product falls under the category of strategic goods under the Foreign Exchange and Foreign Trade Control Law.

***THine Electronics, Inc.***

**[sales@thine.co.jp](mailto:sales@thine.co.jp)**