

Thine Product Selection Guide

Product	Type	Status	Part #	Operating Temperature (°C)	Link	Color Depth [Bits per Pixel]	PLL Clock Frequency [MHz]	Supply Voltage [V]	Input Interface	Output Interface	Package	
LVDS	Serializer	Active	THC63LVD83C(5S)	-40 to +85	1	24	8 to 85	3.3(Typ.)	CMOS/TTL	LVDS	TSSOP56 (14mm x 6.1mm x 1mm)	
		Active	THC63LVD83D	0 to +70	1	24	8 to 160	3.3(Typ.)	CMOS/TTL	LVDS	TSSOP56 (14mm x 6.1mm x 1mm)	
		Active	THC63LVD103D	0 to +70	1	30	8 to 160	3.3(Typ.)	CMOS/TTL	LVDS	TQFP64 (10mm x 10mm x 1mm)	
		Active	THC63LVD823B	-20 to +70	2	24	10 to 160	3.3(Typ.)	CMOS/TTL	LVDS	TQFP100 (14mm x 14mm x 1mm)	
		Active	THC63LVD1023B	-20 to +70	2	30	10 to 160	3.3(Typ.)	CMOS/TTL	LVDS	LQFP144 (20mm x 20mm x 1.4mm)	
		Active	THC63LVD83E	0 to +70	1	24	8 to 160	3.3(Typ.)	CMOS/TTL	LVDS	VFBGA49 (5mm x 5mm x 1mm)	
		Active	THC63LVD87	-40 to +85	1	24	8 to 160	1.8(Typ.)	CMOS/TTL	LVDS	VFBGA49 (5mm x 5mm x 1mm)	
		Active	THC63LVD827	-40 to +85	2	24	10 to 174	1.8(Typ.)	CMOS/TTL	LVDS	VFBGA72 (7mm x 7mm x 1.2mm)	
	Deserializer	Active	THC63LVD84B	-10 to +70	1	24	15 to 85	3.3(Typ.)	LVDS	CMOS/TTL	TSSOP56 (14mm x 6.1mm x 1mm)	
		Active	THC63LVD84B(5S)	-40 to +85	1	24	20 to 65	3.3(Typ.)	LVDS	CMOS/TTL	TSSOP56 (14mm x 6.1mm x 1mm)	
		Active	THC63LVD84B	-10 to +70	1	24	15 to 85	3.3(Typ.)	LVDS	CMOS/TTL	TSSOP56 (14mm x 6.1mm x 1mm)	
		Active	THC63LVD104C	-20 to +85	1	30	8 to 112	3.3(Typ.)	LVDS	CMOS/TTL	TQFP64 (10mm x 10mm x 1mm)	
		Active	THC63LVD824A	-10 to +70	2	24	25 to 170	3.3(Typ.)	LVDS	CMOS/TTL	TQFP100 (14mm x 14mm x 1mm)	
		Active	THC63LVD1024	-40 to +85	2	30	8 to 135	3.3(Typ.)	LVDS	CMOS/TTL	LQFP144 EP (20mm x 20mm x 1.4mm)	
		Contact CEL	THC63LVD1022	0 to +85	2	30	20 to 75	3.3(Typ.)	LVDS	CMOS/TTL	TQFP100 (14mm x 14mm x 1mm)	
		Repeater	Active	THC63LVD1027	-40 to +85	2	30	20 to 85	3.3(Typ.)	LVDS	LVDS	TSSOP64 EP (17mm x 6.1mm x 1mm)
V-by-One®	Serializer	Active	THCV213	0 to +70	1	18	5 to 40	3.3(Typ.)	CMOS/TTL	V-by-One®	TQFP48 (7mm x 7mm x 1mm)	
		Active	THCV213(5T)	-40 to +85	1	18	5 to 40	3.3(Typ.)	CMOS/TTL	V-by-One®	TQFP48 (7mm x 7mm x 1mm)	
	Deserializer	Active	THCV214	0 to +70	1	18	5 to 40	3.3(Typ.)	V-by-One®	CMOS/TTL	TQFP48 (7mm x 7mm x 1mm)	
		Active	THCV214(5T)	-40 to +85	1	18	5 to 40	3.3(Typ.)	V-by-One®	CMOS/TTL	TQFP48 (7mm x 7mm x 1mm)	
V-by-One®HS	Serializer	Active	THCV215	0 to +70	2	18	20 to 100	3.3(Typ.) & 1.8(Typ.)	LVDS	V-by-One®HS	TSSOP64 (17mm x 6.1mm x 1mm)	
						24	20 to 85					
						30	20 to 85					
						36	20 to 75					
		Active	THCV217	-20 to +85	24 / 32	2	Si/So	20 to 85	3.3(Typ.) & 1.8(Typ.)	CMOS/TTL	V-by-One®HS	TFBGA105 (10mm x 10mm x 1.2mm)
							Di/Do	40 to 170				
							Si/Do	20 to 85				
							Di/Do	40 to 170				
		Contact CEL	THCV233	0 to +70	2	24	20 to 100	3.3(Typ.) & 1.8(Typ.)	LVDS	V-by-One®HS	QFN48 (7mm x 7mm x 0.9mm)	
						32	20 to 85					
		Contact CEL	THCV219	-40 to +85	1	24	10 to 100	2.5 to 3.3 (Typ.)	CMOS/TTL	V-by-One®HS	QFN64 (9mm x 9mm x 0.9mm)	
						32	7.5 to 75					
	Contact CEL	THCV231 (New)	-40 to +105	1	12	6 to 160	1.7 to 3.6	CMOS/TTL	V-by-One®HS	QFN32 (5mm x 5mm x 0.9mm)		
					12	6 to 160						
	Contact CEL	THCV231-Q (New)	-40 to +105	1	12	6 to 160	1.7 to 3.6	CMOS/TTL	V-by-One®HS	QFN32 (5mm x 5mm x 0.9mm)		
					12	6 to 160						
	Contact CEL	THCV235 (New)	-40 to +105	1	24	6 to 160	1.7 to 3.6	CMOS/TTL	V-by-One®HS	QFN64 (9mm x 9mm x 0.9mm)		
					32	6 to 160						
	Contact CEL	THCV235-Q (New)	-40 to +105	1	24	6 to 160	1.7 to 3.6	CMOS/TTL	V-by-One®HS	QFN64 (9mm x 9mm x 0.9mm)		
					32	6 to 160						
Deserializer	Active	THCV216	0 to +70	2	18	20 to 100	3.3(Typ.) & 1.8(Typ.)	V-by-One®HS	LVDS	TSSOP64 (17mm x 6.1mm x 1mm)		
					24	20 to 85						
					30	20 to 85						
					36	20 to 75						
	Active	THCV218	-20 to +85	24 / 32	2	Si/So	20 to 85	3.3(Typ.) & 1.8(Typ.)	V-by-One®HS	CMOS/TTL	TFBGA145 (12mm x 12mm x 1.2mm)	
						Di/Do	40 to 170					
						Si/Do	20 to 85					
						Di/Do	40 to 170					
Contact CEL	THCV234	0 to +70	2	24	20 to 100	3.3(Typ.) & 1.8(Typ.)	V-by-One®HS	LVDS	QFN48 (7mm x 7mm x 0.9mm)			
				32	20 to 85							
Contact CEL	THCV220	-40 to +85	1	24	10 to 125	2.5 to 3.3 (Typ.)	V-by-One®HS	CMOS/TTL	QFN64 (9mm x 9mm x 0.9mm)			
				32	7.5 to 93							
Contact CEL	THCV226	-40 to +85	4	24	40 to 157	1.8(Typ.)	V-by-One®HS	LVDS	TQFP128 (14mm x 14mm x 1mm)			
				30	40 to 157							
Contact CEL	THCV236 (New)	-40 to +105	1	24	6 to 160	1.7 to 3.6	V-by-One®HS	CMOS/TTL	QFN64 (9mm x 9mm x 0.9mm)			
				32	6 to 160							
Contact CEL	THCV236-Q (New)	-40 to +105	1	24	6 to 160	1.7 to 3.6	V-by-One®HS	CMOS/TTL	QFN64 (9mm x 9mm x 0.9mm)			
				32	6 to 160							

Product	Status	Part #	Operating Temperature (°C)	I/O	Parallel Ports I/O Format	Sampling Frequency [kHz]	Supply Voltage [V]	Parallel Ports	Serial Ports	Package
I/O Spreader	Active	THCS131*	-40 to +85	8	GPIO 3-wire Serial	125(Typ.)	3.0 to 5.5	CMOS/TTL	LVDS	DIP20 (26.54mm x 7.64mm x 2.92mm)
	Active	THCS132*	-40 to +85	16	GPIO 3-wire Serial	125(Typ.) for unidirection / 70(Typ.) for (bidirection)	3.0 to 5.5	CMOS/TTL	LVDS	QFN32 (5mm x 5mm x 0.9mm)
	Contact CEL	THCS133**	-40 to +85	8	GPIO 3-wire Serial	125(Typ.)	3.0 to 5.5	CMOS/TTL	LVDS	DIP20 (26.54mm x 7.64mm x 2.92mm)
	Contact CEL	THCS134**	-40 to +85	16	GPIO 3-wire Serial	125(Typ.) for unidirection / 70(Typ.) for (bidirection)	3.0 to 5.5	CMOS/TTL	LVDS	QFN32 (5mm x 5mm x 0.9mm)

Note: *Parallel Port Internal Condition : 500kΩ Pull-up
 **: Parallel Port Internal Condition : 250kΩ Pull-down

Product	Type	Status	Part #	Operating Temperature (°C)	Output Channel	Type	Drive Current/ch	Output Voltage	Brightness	Group Brightness	Package
LED Driver	Illumination	Active	THL3501	-40 to +85	16ch	Constant Voltage	Max. 100mA	Max. 40V	256 Steps	64 Steps	QFN40 EP (6mm x 6mm x 0.9mm)
		Active	THL3502	-40 to +85	24ch	Constant Voltage	Max. 100mA	Max. 40V	256 Steps	64 Steps	QFN48 EP (7mm x 7mm x 0.9mm)
		Active	THL3503	-40 to +85	16ch	Constant Current	Max. 40mA	Max. 40V	256 Steps	64 Steps	QFN40 EP (6mm x 6mm x 0.9mm)
		Active	THL3504	-40 to +85	24ch	Constant Current	Max. 40mA	Max. 40V	256 Steps	64 Steps	QFN48 EP (7mm x 7mm x 0.9mm)
		Active	THL3512	-40 to +85	24ch	Constant Voltage	Max. 100mA	Max. 40V	256 Steps	64 Steps	QFN48 EP (7mm x 7mm x 0.9mm)
		Active	THL3514	-40 to +85	24ch	Constant Current	Max. 40mA	Max. 40V	256 Steps	64 Steps	QFN48 EP (7mm x 7mm x 0.9mm)

Product Type	Type	Status	Part #	Operating Temperature (°C)	Output Channel	Input Voltage [V]	Switching Frequency [Hz]	Feedback Voltage [V]	Operation Type	Control Method	Powerlinker™	Package
DC/DC Converter	Sync. buck switching regulator	Active	THV3011	-40 to +85	1	7.5-28	360k or 500k	0.85V±1% Maximum Output Voltage:4.0V	Synchronous Buck	Transphase™	Start-up Shut-down	TSSOP16 (5mm x 4.4mm x 0.9mm)

Product Type	Type	Status	Part #	Operating Temperature (°C)	Supply Voltage [V]	Number of Channels	ADC Resolution [bits]	Sampling/PLL Clock Frequency [MHz]	Color Depth [Bits per Pixel]	Acceptable Signals	Package
Analog to Digital Converter	Video Signal Digitizer	Active	THC7984-17	0 to +70	3.3 (Typ.) & 1.8 (Typ.)	3ch x 2ports	14	10 to 170	30	RGB & YPbPr	LQFP80 (14mm x 14mm x 1.4mm)