Termination Panel with Differential Receivers for Counter Input CTP-4D



* Specifications, color and design of the products are subject to change without notice.

Features

Differential input enabled with the CNT3204MT-LPE,

CNT32-4MT(LPCI), CNT32-4MT(CB).

Capable of differential input by connection to the CNT3204MT-LPE, CNT32-4MT(LPCI), CNT32-4MT(CB).

Designed to be compact to stay out of the way on the desktop Small terminal box available by the side a notebook PC. Highly portable as the cable is connector-removable.

Lightweight design based on the aluminum housing Lightweight aluminum housing contributing to portability

Easy to replace the PCI bus board CNT32-8M(PCI)

Connecting the CTP-4D to the CNT3204MT-LPE, CNT32-4MT(LPCI), CNT32-4MT(CB) provides the equivalent interface to the CNT32-8M(PCI). Using a half-pitch 96-pin connector designed with pin compatibility (*1) *1: Not completely compatible

Built-in power LED

The built-in power LED tells whether the CTP-4D is powered.

Packing List

Terminal [CTP-4D] ...1 User's Guide ...1 Warranty Certificate ...1 Serial Number Label...1 This product is a differential input conversion terminal for the CNT3204MT-LPE, CNT32-4MT(LPCI), CNT32-4MT(CB) a 32-bit high-speed up/down counter card manufactured by CONTEC.

This product enables differential input by being connected between the CNT3204MT-LPE, CNT32-4MT(LPCI), CNT32-4MT(CB) and a differential input device. (The CTP-4D requires a CNT-68M/50M optional cable for connection with the CNT3204MT-LPE, CNT32-4MT(LPCI), CNT32-4MT(CB).)

< Example >



- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details in the document.
- * The information in the data sheets is as of July 2022.

Item Specification Input Counter Up/down counting [2-phass/ingl-phase/ingl-phase/ingl-phase input with Gate Control Attached) Max count Up/down counting [2-phass/ingl-phase/ingl-phase/ingl-phase input with Gate Control Attached) Max count Inferminal input Max count Effifirential input Phase-AUD IX 4 channels. Counter input signal Phase-AUD IX 4 channels Phase-AUD IX 4 channels Device used: AM26C32 (T) or equivalent to it Registor: 1500 (Separatable with SW) Receiver input sensitivity: 320mV Differential input part Receiver input sensitivity: 320mV Response frequency 10MHz 50% duty Sampling input Samt / dock / stop 1 point each Response frequency 10Misec (Max) Control input signal Unisolated TTL level input Dype Unisolated TTL level input Control Sampling input signal Up: Unisolated TTL level input Differential input signal Unisolated TTL level input Control Control input signal Unisolated TTL level input Control Control Unisolated open-colector output or TTL level output (selectable by SW1) Control Contrt		Specifications							
Input Counter Count system Count system Count system Count system Count system Count system Count system Count system Count input System Counter input signal Phase ADOWN 1 x 4 channels, Counter input signal Phase ADOWN 1 x 4 channels, Phase ADOWN 1 x 4 channels, Phase ADOWN 1 x 4 channels, Phase ADOWN 1 x 4 channels, Counter input signal Phase ADOWN 1 x 4 channels, Counter input signal Phase ADOWN 1 x 4 channels, Counter input signal Differential input part Response frequency. 10MHz 50% duty Sampling input signal Unsolated TTL level input Control input signal Differential input signal Differential input signal Differential input signal Control input signal Differential input signal Differential input signal Differential input signal Differential input signal Differential input signal Differential TL level input Control input signal Differential TL level input Control input signal Differential TL level input Control output signal Differential TL level input Control output signal Differential Differential Control input signal Differential TL level input tor output or TTL level output (selectable by SWI) Control output signal Control output channel Control output signal Control		ltem	Specification						
Counter Channel count Channels Count system Counter input System Differential input Differential input Differential input Differential input Differential input System Counter input System Differential Input System Differ	Input								
Channel count 4 channels Court system Count system Count system Count of the selection of t		Counter							
Count system Up/down counting Count system Up/down Single-phase/Single-phase Input with Gate Control Attached) Max. count FFFFFFR/binary data 328it) Input type Differential input Phase-AUP 1 x4 channels Phase-AUP 1 x4 channels Device used: AMBCG32 (TD) or equivalent to it Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Differential input part In-phase input votage enge: ±7V Allowable distance of signal extension: 1200m Output separatable with SW) Sampling input signal Unisolated TTL level input Sympling input signal Unisolated TTL level input Sympling input signal Unisolated TTL level input Sype Unisolated Oper-collector output of TTL level output (selectable by SWI) Control input Signal Unisolated oper-collector output of TTL level output (selectable by SWI) Control output signal 1 v4 channels Response time		Channel count	4 channels						
Max. count IFFFFFFFIbinary data, 328(t) Input type Differential input Input type Phase-R/DOWN 1 x 4 channels, Counter input signal Phase-R/DOWN 1 x 4 channels, Device used: AM26G32 (1) or equivalent to it Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Registor: 1500 (Separatable with SW) Response frequency 100Hz 50% duty Sampling input signal Unisolated TTL level input type Unisolated TTL level input type Control '13 Control '19 Garophing and Unisolated TTL level input type Unisolated TTL level input type Control '14 Control '15 Control input Channel Text of the signal Unisolated open-collector output or TTL level output (selectable by SW1) Control output signal 1 x 4 channels Response time 100nsec (Max) Output'3 Control output signal 1 x 4 channels Response time 100sec (Max) Control output signal <t< td=""><td></td><td>Count system</td><td colspan="4">Up/down counting (2-phase/Single-phase/Single-phase Input with Gate Control Attached)</td></t<>		Count system	Up/down counting (2-phase/Single-phase/Single-phase Input with Gate Control Attached)						
Input type Differential input Counter input signal Phase-AUP Phase-Z/LR 1x 4 channels Device used: AM26C32 (TI) or equivalent to it Registor: ISOU (Separatable with SW) Differential input part Receiver input sensitivity: ±200mV In-phase input voltage range: ±7V Allowable distance of signal extension: 1200m Differential input part Receiver input sensitivity: ±200mV Sampling input signal Unisolated TTL level input Sampling input signal Unisolated TTL level input Sampling input signal Start / dock / stop 1 point each Response time 100nsec (Max) Control input signal Unisolated TTL level input Output*3 Control input signal Zontrol input signal Unisolated OTL level input Control input signal Unisolated open-collector output or TTL level output (selectable by SWI) Control output signal type Unisolated open-collector output or TTL level output (selectable by SWI) Control output signal - Count match 1 output(one-shot pulse output) Control output signal - Count match 0 output (one-shot pulse output) Control output signal A channels		Max. count	FFFFFFFh(binary data, 32Bit)						
Counter input signal Phase-B/DOWN 1 x4 channels Phase-B/DOWN 1 x4 channels Phase-B/DOWN 1 x4 channels Differential input part Registor: 1500 (Separatable with SW) Receiver input sensitivity : ±200mV In-phase input voltage range: ±7V Allowable distance of signal extension: 1200m Depending on wiring environment and input frequency) *1*2 Response frequency 10MHz 50% duty Sampling input signal Unisolated TTL level input Yppe Unisolated TTL level input Yppe Control input signal Visolated TTL level input Sampling input signal Vppe Unisolated TTL level input Sampling input signal Unisolated TTL level input Yppe Control input Signal Control input Channel 1 x4 channels Response time 100nsec (Max) Output*3 Control control tract no output (one-shot pulse output) Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output signal - Count match 1 output(one-shot pulse output) Control output signal - Count match 1 output(one-shot pulse output) Control output sig		Input type	Differential input						
Device used : AM26C32 (TJ) or equivalent to it Registor : ISQI (Separatable with SW) Differential input part In-phase input voltage range : ±7V Allowable distance of signal extension : 1200m (Depending on wining environment and input frequency) *1*2 Response frequency 10MHz 50% duty Sampling input signal Unisolated TTL level input Sype Sampling input signal Sampling input signal Unisolated TTL level input Sampling input signal Unisolated TTL level input Sype Control *3 Control input signal Unisolated TTL level input Sype Unisolated TTL level input Control input signal Unisolated open-collector output or TTL level output (selectable by SWI) Control output signal type Unisolated open-collector output or TTL level output (selectable by SWI) Control output signal - Court match 1 output(one-shot pulse output) - Court match 1 output(one-shot pulse output) - Open = shore output) Control output signa		Counter input signal	Phase-A/UP 1 x 4 channels, Phase-B/DOWN 1 x 4 channels Phase-Z/CLR 1 x 4 channels						
Response frequency 10MHz 50% duty Sampling input signal type Unisolated TTL level input Sampling input channel Start / dock / stop 1 point each Response time 100nsec (Max) Control*3 Control input signal type Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control Control output signal type Unisolated TTL level input Control Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SWI) Control Control output channel Control output channel 1 x 4 channels Control output channel 1 x 4 channels Control output channel 1 x 4 channels Control output signal - Count match 0 output on TTL level output (selectable by SWI) Control output channel - Count match 0 output on spluse output) Control output signal - Count match 0 output output output Control output signal - Abnormal input error output clevel output) Control output signal - Selected between 10µsec, 10µsec, 10msec, 10msec and 100 msec <t< td=""><td></td><td>Differential input part</td><td colspan="5">Device used : AM26C32 (T.I) or equivalent to it Registor : 1500 (Separatable with SW) Receiver input sensitivity : ±200mV In-phase input voltage range : ±7V Allowable distance of signal extension : 1200m (Decending on wiring environment and input frequency) *1*2</td></t<>		Differential input part	Device used : AM26C32 (T.I) or equivalent to it Registor : 1500 (Separatable with SW) Receiver input sensitivity : ±200mV In-phase input voltage range : ±7V Allowable distance of signal extension : 1200m (Decending on wiring environment and input frequency) *1*2						
Sampling input signal type Unisolated TTL level input Sampling input channel Start / dock / stop 1 point each Response time 100nsec (Max) Control input signal type Unisolated TTL level input Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control output signal type Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output signal - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Control output signal - Abnormal input error output(one-shot pulse output) - Control output signal - General-purpose output[Level output] - One shot output signal - Selected between 10µsec, 10µsec, Timse; Amat 100 msec amplitude Rated output current 30V 40mA Test pulse Selected of phases-A and B Output frequency 100kHz fixed Sampling Sampling Sampling Sampling Sampling Sampling		Response frequency	10MHz 50% duty						
Sampling input signal type Unisolated TTL level input Sampling input channel Start / dock / stop 1 point each Response time 100nsec (Max) Control input signal type Unisolated TTL level input Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control output signal type Control output channel 1 x 4 channels Control Control output signal type Control output channel 1 x 4 channels Control Control output channel Control output channel 1 x 4 channels Control output signal - Count match 0 output(one-shot pulse output) Control output signal - Count match 1 output(nee-shot pulse output) Control output signal - General-purpose output(Level output) Software-sele		Sampling*3							
Sampling input channel Start / dock / stop 1 point each Response time 100nsec (Max) Control input signal type Unisolated TTL level input Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control Control Control output signal type Control Unisolated open-collector output or TTL level output (selectable by SWI) Control Control output signal type Control output signal 1 x 4 channels Control output signal - Count match 0 output(one-shot pulse output) Control output signal - Count match 1 output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) Control output signal - Count match 1 output(sele output) Software-selected from among the above five options (Positive/negative logic is selected with the software.) One shot output signal Selected between 10µsec, 10µsec, 110µsec,		Sampling input signal type	Unisolated TTL level input						
Response time 100nsec (Max) Control*3 Control input signal type Unisolated TTL level input Control input Channel 1 x 4 channels Response time Output*3 Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels Control output channel 1 x 4 channels Control output signal - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Control output signal - Abnormal input error output(level output) - General-purpose output(Level output) - General-purpose output(Level output) Software-selected from among the above five options (Positive/negative logic is selected with the software.) One shot output signal Selected between 10µsec, 10µsec		Sampling input channel	Start / dock / stop 1 point each						
Control*3 Control input signal Unisolated TTL level input Lontrol input Channel 1 x 4 channels Control Control 1 x 4 channels Control Control 100nsec (Max) Control Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels - Count match 1 output(one-shot pulse output) Control output channel - Count match 1 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) - General-purpose output(level output) Control output signal - Abnormal input error output(one-shot pulse output) - General-purpose output(level output) Control output signal - Abnormal input error output(one-shot pulse output) - General-purpose output(level output) Control output signal - Beneral-purpose output(level output) - General-purpose output(level output) Control output signal - Beneral-purpose output(level output) - General-purpose output(level output) Software-selected from among the above five options (Postive/negative logic is selected with the software.) One shot		Response time	100nsec (Max.)						
Control input signal type Unisolated TTL level input Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels Control output channel 1 x 4 channels Control output channel - Count match 0 output(one-shot pulse output) Control output signal - Count match 1 output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) Control output signal - Abnormal input error output(one-shot pulse output) Control output signal - Software-selected from among the above five options (Positive/negative logic is selected with the software) One shot output signal Selected between 10µsec, 10µsec, 1msec, 10msec and 100 msec amplitude Rated output current 30V 40mA Test pulse Test pulse output signal type Test pulse output signal type Differential output Test pulse output signal type Unisolated TTL level output		Control*3							
Control input Channel 1 x 4 channels Response time 100nsec (Max) Output*3 Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels - Control output channel 1 x 4 channels - Control output channel - Count match 0 output(one-shot pulse output) - - Digital filter error output(one-shot pulse output) - Oiget affilter error output(one-shot pulse output) Control output signal - Abnormal input error output(cel output) - General-purpose output! - General-purpose output! - One shot output signal Selected between 10µsec, 10µsec, 10msec, and 100 msec amplitude (Can be set for each channel, within precision + 1µsec) Response time SIBsec (Max) Rated output current 30V 40mA Test pulse output signal type Differential output Sampling output signal type Unisolated TTL level output Sampling output signal type Unisolated TTL level output Sampling output signal type Unisolated TTL level output Sampling output signal type		Control input signal type	Unisolated TTL level input						
Response time 100nsec (Max) Output*3 Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels Control output channel - Count match 0 output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - General-purpose output(one-shot pulse output) - One shot output signal Selected between 10,usec, 10,usec, 1nsec, 10msec and 100 msec amplitude (Can be set for each channel, within precision + 1,usec) Response time Silsec (Max)<		Control input Channel	1 x 4 channels						
Output*3 Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Onormal input error output(one-shot pulse output) - General-purpose output(Level output) - General-purpose output(Level output) - Software-selected from among the above five options (Positive/negative logic is selected with the software.) One shot output signal Selected between 10µsec, 100µsec, 1msec, 10msec and 100 msec amplitude Response time SElsec (Max) Rated output current 30V 40mA Test pulse Differential output Test pulse Differential output Test pulse output signal type Differential output Sampling output signal width Negative logic 100nsec (fixed) Common Sampling output signal width Common 33VDC Power consumption 33VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When ON : 500mA(Max) Operating condition 0 - 50°C, 10 - 90%RH (No condensation)		Response time	100nsec (Max.)						
Control Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Control output signal - Abnormal input error output(one-shot pulse output) - General-purpose output(uevel output) - General-purpose output(uevel output) - General-purpose output(uevel output Sampling Rated output signal Selected between 10µsec, 100µsec, 1msec, 10msec and 100 msec ampliting Test pulse Differential output Test pulse Differential output Test pulse Test pulse output signal type	Outp	ut*3							
Control output signal type Unisolated open-collector output or TTL level output (selectable by SW1) Control output channel 1 x 4 channels - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - General-purpose output(Level output) - General-purpose output(Level output) - General-purpose output displant - General-purpose output(Level output) - Rated output current 30V 40mA Test pulse Differential output Test pulse output signal type Differential output Test pulse output signal One for each of phases-A and B Output frequency 100kHz fixed		Control							
Control output channel 1 x 4 channels - Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Control output signal - General-purpose output(Level output) - General-purpose output(Level output) - General-purpose output(Level output) - General-purpose output(Level output - General-purpose outputsignal type - Response time 5Elsec (Max) Rated output current 30V 40mA Test pulse output signal type Differential output - Test pulse output signal type Differential output - Sampling Sampling Sampling output signal		Control output signal type	Unisolated open-collector output or TTL level output (selectable by SW1)						
- Count match 0 output(one-shot pulse output) - Count match 1 output(one-shot pulse output) - Digital filter error output(one-shot pulse output) - Control output signal - Control output signal - General-purpose output(Level output) - Response time Size(Max) Rated output current 30V 40mA Test pulse output signal type Differential output Test pulse output signal type Differential output - Test pulse output signal type Unisolated TTL level output Sampling output channel Start / dock / stop 1 point each		Control output channel	1 x 4 channels						
One shot output signal amplitude Selected between 10,usec, 100,usec, 1msec, 100 msec (Can be set for each channel, within precision + 1,usec) Response time 5Esec (Max) Rated output current 30V 40mA Test pulse Test pulse output signal type Output frequency 100 KHz fixed Sampling 0 one for each of phases-A and B Output frequency 100 KHz fixed Sampling Sampling output signal type Visiolated TTL level output Sampling Sampling output signal type Unisolated TTL level output Sampling output signal width Negative logic 100nsec (fixed) Common 3.3VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When OFF : 300mA (Max) / Terminal registor (When ON: 5.00mA(Max)) Operating condition 0 - 50°C, 10 - 90% RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Control output signal	Count match 0 output(one-shot pulse output) Count match 1 output(one-shot pulse output) Digital filter error output(one-shot pulse output) Abnormal input error output(one-shot pulse output) General-purpose output(Level output) Software-selected from among the above five options (Positive/receative logic is selected with the software.)						
amplitude (Can be set for each channel, within precision + 1µsec) Response time 5⊡sec (Max) Rated output current 30V40mA Test pulse Test pulse output signal type Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling Sampling output signal type Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC. Terminal registor (When OFF : 300mA (Max) / Terminal registor (When OFF : 300mA (Max)) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		One shot output signal	Selected between 10µsec, 100µsec, 1msec, 10msec and 100 msec						
Response time SElsec (Max) Rated output current 30V 40mA Test pulse Test pulse output signal type Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling Sampling output channel Sampling output channel Start / clock / stop 1 point each One-shot output signal type Unisolated TTL level output Sampling output channel Start / clock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When OFF : 300mA (Max)) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		amplitude	(Can be set for each channel, within precision + 1µsec)						
Rated output current 30V 40mA Test pulse Test pulse output signal type Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling output channel Sampling output channel Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When ON : 500mA(Max)) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Response time	50sec (Max.)						
Test pulse output signal type Differential output Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling Sampling output signal type Unisolated TTL level output Sampling output signal type Sampling output signal type Unisolated TTL level output Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When ON : 500mA(Max) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Rated output current	30V 40mA						
Test pulse output signal type Differential output Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling Sampling output signal type Sampling output signal type Unisolated TTL level output Sampling output signal type Unisolated TTL level output Sampling output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON : 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Test pulse	•						
Test pulse output channel One for each of phases-A and B Output frequency 100kHz fixed Sampling Sampling output signal type Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Test pulse output signal type	Differential output						
Output frequency 100kHz fixed Sampling Sampling output signal type Unisolated TTL level output Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Terminal registor (When OFF : 300mA (Max,) / Terminal registor (When OFF : 300mA (Max,) / Terminal registor (When ON : 500mA(Max,) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Test pulse output channel	One for each of phases-A and B						
Sampling Sampling output signal type Unisolated TTL level output Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON: 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Output frequency	100kHz fixed						
Sampling output signal type Unisolated TTL level output Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Sampling							
Sampling output channel Start / dock / stop 1 point each One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON : 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		Sampling output signal type	Unisolated TTL level output						
One-shot output signal width Negative logic 100nsec (fixed) Common 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON : 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion) 120.0W) x 88.0(D) x 22.0(H) (No protrusion) Image: Condensation (Max.)		Sampling output channel	Start / clock / stop 1 point each						
Common 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON : 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)		One-shot output signal width	Negative logic 100nsec (fixed)						
Power consumption 3.3VDC Terminal registor (When OFF : 300mA (Max.) / Terminal registor (When ON : 500mA(Max.) Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0W) x 88.0(D) x 22.0(H) (No protrusion)	Common								
Operating condition 0 - 50°C, 10 - 90%RH (No condensation) External dimension (mm) 120.0(W) x 88.0(D) x 22.0(H) (No protrusion)		Power consumption	3.3VDC Terminal registor (When OFF : 300mA (Max) / Terminal registor (When ON : 500mA(Max)						
External dimension (mm) 120.0(W) x 88.0(D) x 22.0(H) (No protrusion)	1	Operating condition	0 - 50°C, 10 - 90%RH (No condensation)						
		External dimension (mm)	120.0(W) x 88.0(D) x 22.0(H) (No protrusion)						

Weight	160g			
Standard	VCCI Class A, CE Marking (EMC Directive Class A, RoHS Directive) , UKCA			

- *1 The frequency responsive at an extension of 50 m is about 10 MHz (depending on the wiring environment). The frequency responsive at an extension of 100 m is about 5 MHz (depending on the wiring environment). The frequency responsive at an extension of 150 m is about 1.5 MHz (depending on the wiring environment). The frequency responsive at an extension of 300 m is about 1 MHz (depending on the wiring environment). The frequency responsive at an extension of 600 m is about 500 KHz (depending on the wiring environment). The frequency responsive at an extension of 1200 m is about 500 KHz (depending on the wiring environment). The frequency responsive at an extension of 1200 m is about 80 KHz (depending on the wiring environment).
- *2 Please use the shielded cable with a length of less than 30m to meet "CE EMC Directive"
 *3 Please use the shielded cable to meet "CE EMC Directive".

Cable & Connector

Cable (Option)

Shielded cable for CardBus counter input card : CNT-68M/50M (0.5m) (necessity)

Shielded cable with double-ended connector for 96-pin half-pitch connector

(Molded type): PCB96PS-0.5P (0.5m), PCB96PS-1.5P (1.5m)

Flat cable with double-ended connector for 96-pin half-pitch connector : $\label{eq:problem} PCB96P-1.5~(1.5m)$

Shielded cable with single-ended connector for 96-pin half-pitch connector (Molded type): PCA96PS-0.5P (0.5m), PCA96PS-1.5P (1.5m)

Flat cable with single-ended connector for 96-pin half-pitch connector : PCA96P-1.5 (1.5m)

* Information about the option products, see the Contec's website.

List of Option

Accessories (Option)							
Screw Terminal Unit (M3 x 96P)	: EPD-96A *1 *2						
Screw Terminal Unit (M3.5 x 96P)	: EPD-96 *1						
Terminal Unit for Cables (M3 x 96P)	: DTP-64A *1						

*1 PCB96P or PCB96PS optional cable is required separately.

*2 "Spring-up" type terminal is used to prevent terminal screws from falling off. * Check the CONTEC's Web site for more information on these options.

External Dimensions





Using the On-Terminal Connectors

Connecting a Terminal to a Connector

Use the on-terminal interface connector (CN1) to connect the terminal to an external device.



Connector Pin Assignment

Use the connector mounting the terminal to connect it to an external device.

			\sim		
		[49]	[1]	1	
Ground	GND		A 48 ·····	GND	Cround
Ground	CND	B40	A47	GND	Cround
Not connected	N.C.	D11	A46	D37-	CH2 differential phase-7 input-
Not connected	N.C.	D40	A 45	D3Z+	CH2 differential phase Z input
Not connected	N.C.	D40	A40	DoD.	CH2 differential phase Z input+
Not connected	N.C.	D44 D49	A 49	D3D+	CH2 differential phase B input
Not connected	N.C.	D40 D49	A40 A42	D3D+	CH2 differential phase B input+
Not connected	N.C.	D42 D41	A41	D2A+	CH3 differential phase A
Ground	IN.U.	D41 D40	A40	CND	Cho differential phase A input+
Ground	GND	D40	A20	CND	Ground
Not connected	GND	D09	A00	Doz	Ground
Not connected	N.C.	D00	A07	D22-	CH2 differential phase-Z input-
Not connected	N.C.	D01	A07	DOD	CH2 differential phase-Z input+
Not connected	N.C.	- B36	A30	D2D-	CH2 differential phase-Binput-
Not connected	N.C.	D00	A00	D2DT	CH2 differential phase B input+
Not connected	N.C.	D04	A04	D2A-	CH2 differential phase-A input-
Not connected	N.C.	B33	A00	DZAT CNID	CH2 differential phase-A input+
Ground	GND	B32	A32	GND	Ground
Ground	GND	B31	A31	GND	Ground
Not connected	N.C.	B30	A30	DIZ-	CH1 differential phase-Z input-
Not connected	N.C.	B29	A29	DILT	CH1 differential phase-Z input+
Not connected	N.C.	B28	A28	DIB-	CH1 differential phase-B input-
Not connected	N.C.	B27	A27	DIB+	CH1 differential phase-B input+
Not connected	N.C.	B26	A26	DIA-	CH1 differential phase A input
Not connected	N.C.	B25	A25	DIA+	CH1 differential phase A input+
Ground	GND.	B24	A24	GND	Ground
Ground	GND-	B23	A23	GND	Ground
Not connected	N.C.	B22	A22	D0Z-	CH0 differential phase Z input
Not connected	N.C.	B21	A21	D0Z+	CH0 differential phase-Z input+
Not connected	N.C.	B20	A20	D0B-	CH0 differential phase B input-
Not connected	N.C.	B19	A19	D0B+	CH0 differential phase-B input+
Not connected	N.C.	B18	A18	DOA-	CH0 differential phase A input
Not connected	N.C.	B17	A17	D0A+	CH0 differential phase-A input+
Ground	GND-	B16	A16	GND	Ground
Ground	GND-	B15	A15	GND	Ground
Not connected	N.C.	B14	A14	D13	CH3 control input *1
Not connected	N.C.	B13	A13	DI2	CH2 control input *1
Not connected	N.C.	B12	A12	DI1	CH1 control input *1
Not connected	N.C.	B11	A11	D10	CH0 control input *1
External sampling start signal input	EXTSTART.	B10	A10 ·····	EXTCLE	External sampling clock input
External sampling stop signal input	EXTSTOP	···· B09	A09	GND	Ground
Ground	GND	B08	A08 ·····	GND	Ground
Not connected	N.C.	···· B07	A07 ·····	DO3	CH3 control output *2
Sampling start trigger signal output	STARTOUT	···· B06	A06 ·····	DO2	CH2 control output *2
Sampling stop trigger signal output	STOPOUT	···· B05	A05 ·····	DO1	CH1 control output *2
Sapmpling clock trigger signal output	CLKOUT	···· B04	A04	DO0	CH0 control output *2
Ground	GND	···· B03	A03 ·····	GND	Ground
Test pulse differential phase A output	TPOA-	···· B02	A02 ·····	TPOB-	Test pulse differential phase-B output-
Test pulse differential phase-A output+	TPOA+	B01	A01	TPOB+	Test pulse differential phase-B output+
	,	[96]	[48]		

[] shows the pin No. specified by the HONDA TSUSHIN KOGYO., CO.LTD.

*1 The control input can serve as the general-input, counter start/stop, preset, and zero-clear. *2 The control output can serve as the general-output, count match, abnormal input error and digital filter error.