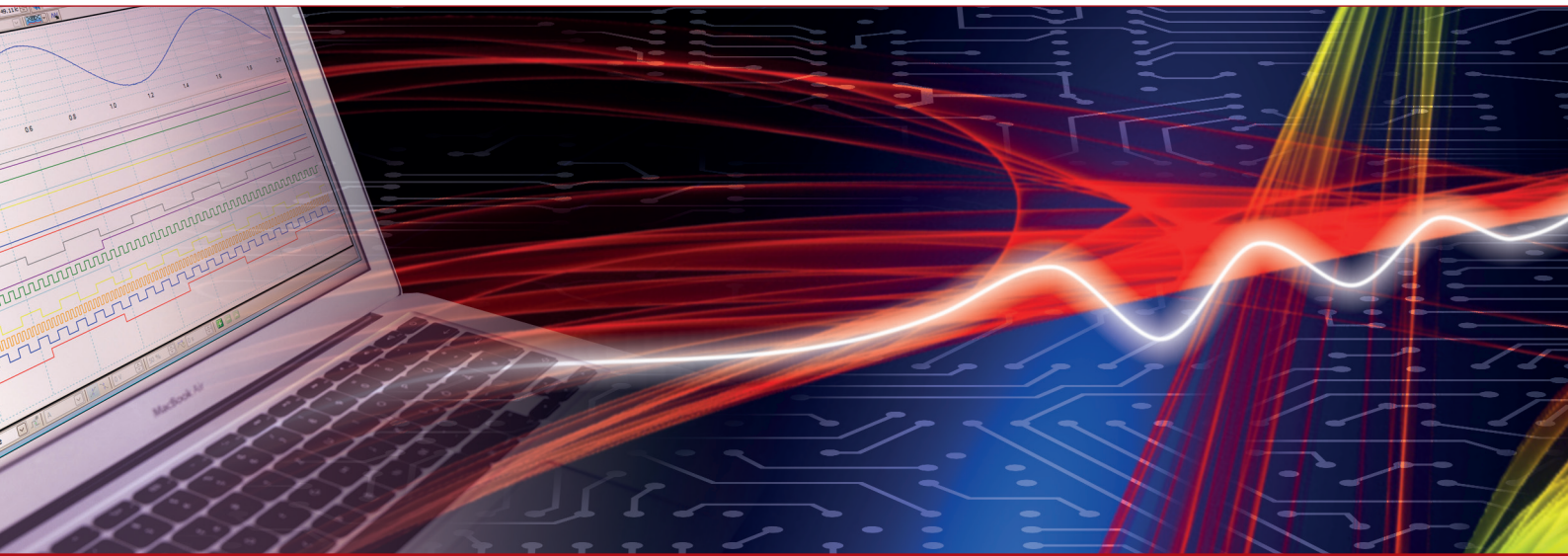


Product Datasheet - Technical Specifications



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ME-5314 TTL-Digital-E/A and Counter Board

- PC plug-in board for the acquisition of digital data and status, control, and counting.
- 3, 6, or 15 counters. 8254-compatible 16 bit counters. All lines (clock, gate, out) with TTL level, wired to the D-sub connector.
- Counters programmable independently. Counters can be cascaded via software.
- Interrupt control.
- 10 MHz clock (quartz oscillator), independent from PC clock; software-selectable to 1 MHz.
- 24 or 48 digital input/output channels. TTL level.
- PC DAQ board for PCI-Express or PXI-Express.
- Versions with various pull-up/pull-down configurations available.

Model	Digital-I/O	Counter	Pull-up	Pull-down	Bus platform
ME-5314A PCIe	24 (3x 8-bit-Port)	3, 16 bit	Gate	DIO, Clk	x1 PCI-Express
ME-5314A-1 PCIe			DIO, Clk, Gate	-	
ME-5314A-2 PCIe			Clk, Gate	DIO	
ME-5314A-3 PCIe			-	DIO, Clk, Gate	
ME-5314A-4 PCIe			DIO	Clk, Gate	
ME-5314B PCIe	48 (6x 8-bit-Port)	6, 16 bit	Gate	DIO, Clk	
ME-5314B-1 PCIe			DIO, Clk, Gate	-	
ME-5314B-2 PCIe			Clk, Gate	DIO	
ME-5314B-3 PCIe			-	DIO, Clk, Gate	
ME-5314B-4 PCIe			DIO	Clk, Gate	
ME-5314C PCIe	24 (3x 8-bit-Port)	15, 16 bit	Clk, Gate	DIO	
ME-5314C-1 PCIe			DIO, Clk, Gate	-	
ME-5314C-2 PCIe			-	DIO, Clk, Gate	
ME-5314C-3 PCIe			DIO	Clk, Gate	
ME-5314A PXIe	24 (3x 8-bit-Port)	3, 16 bit	Gate	DIO, Clk	3 HE PXI-Express (Version 2.0, PICMG 2.0 R3)
ME-5314A-1 PXIe			DIO, Clk, Gate	-	
ME-5314A-2 PXIe			Clk, Gate	DIO	
ME-5314A-3 PXIe			-	DIO, Clk, Gate	
ME-5314A-4 PXIe			DIO	Clk, Gate	
ME-5314B PXIe	48 (6x 8-bit-Port)	6, 16 bit	Gate	DIO, Clk	
ME-5314B-1 PXIe			DIO, Clk, Gate	-	
ME-5314B-2 PXIe			Clk, Gate	DIO	
ME-5314B-3 PXIe			-	DIO, Clk, Gate	
ME-5314B-4 PXIe			DIO	Clk, Gate	
ME-5314C PXIe	24 (3x 8-bit-Port)	15, 16 bit	Clk, Gate	DIO	
ME-5314C-1 PXIe			DIO, Clk, Gate	-	
ME-5314C-2 PXIe			-	DIO, Clk, Gate	
ME-5314C-3 PXIe			DIO	Clk, Gate	

Specification

PC Interface (ME-5314A/B/C)

PCI-Express-Bus	PCI-Express x1, Version 2.0
PXI-Express-Bus	PCI-Express x1, Version 2.0, PICMG 2.0 R3
Plug&Play functionality	Is fully supported

Digital I/O

Number	ME-5314A/C: 24, TTL-compatible ME-5314B: 48, TTL-compatible
Input voltage	low: -0,5 V...+0,8 V ($I_{ILmax} = \pm 10 \mu A$) high: +2,0 V...+5,5 V ($I_{IHmax} = \pm 10 \mu A$)
Output voltage	low: max. +0,45 V ($I_{OL} = +2.5 \text{ mA}$) high: min. +2,4 V ($I_{OH} = -2.5 \text{ mA}$)

Counter

Number	ME-5314A: 3 independent ME-5314B: 6 independent ME-5314C: 15 independent
Type	82(C) 54
Resolution	16 bit
Input voltage	low: -0.5 V...+0,8 V ($I_{ILmax} = \pm 10 \mu A$) high: +2.2 V...+6 V ($I_{IHmax} = \pm 10 \mu A$)
Output voltage	low: max. +0.45 V ($I_{OL} = +2.5 \text{ mA}$) high: min. +2.4 V ($I_{OH} = -2.5 \text{ mA}$)

Quartzoscillator

Frequency	1 MHz or 10 MHz selectable (by software)
Accuracy	$\pm 100 \text{ ppm}$ ($\pm 0.01 \%$)
Output level	LS-TTL

General Information

PCIe/PXIe-models: Power consumption at +3,3 V (without load)	ME-5314A typ. 260 mA ME-5314B: typ. 300 mA ME-5314C: typ. 260 mA
--	--

Physical size (without mounting bracket and connector)	ME-5314A/B/C: 160 x 108 mm PXle-Modelle: 100 x 160 mm
Connectors	ME-5314A/B/C: 78-pin D-Sub female connector at the mounting bracket of the board

Common Data

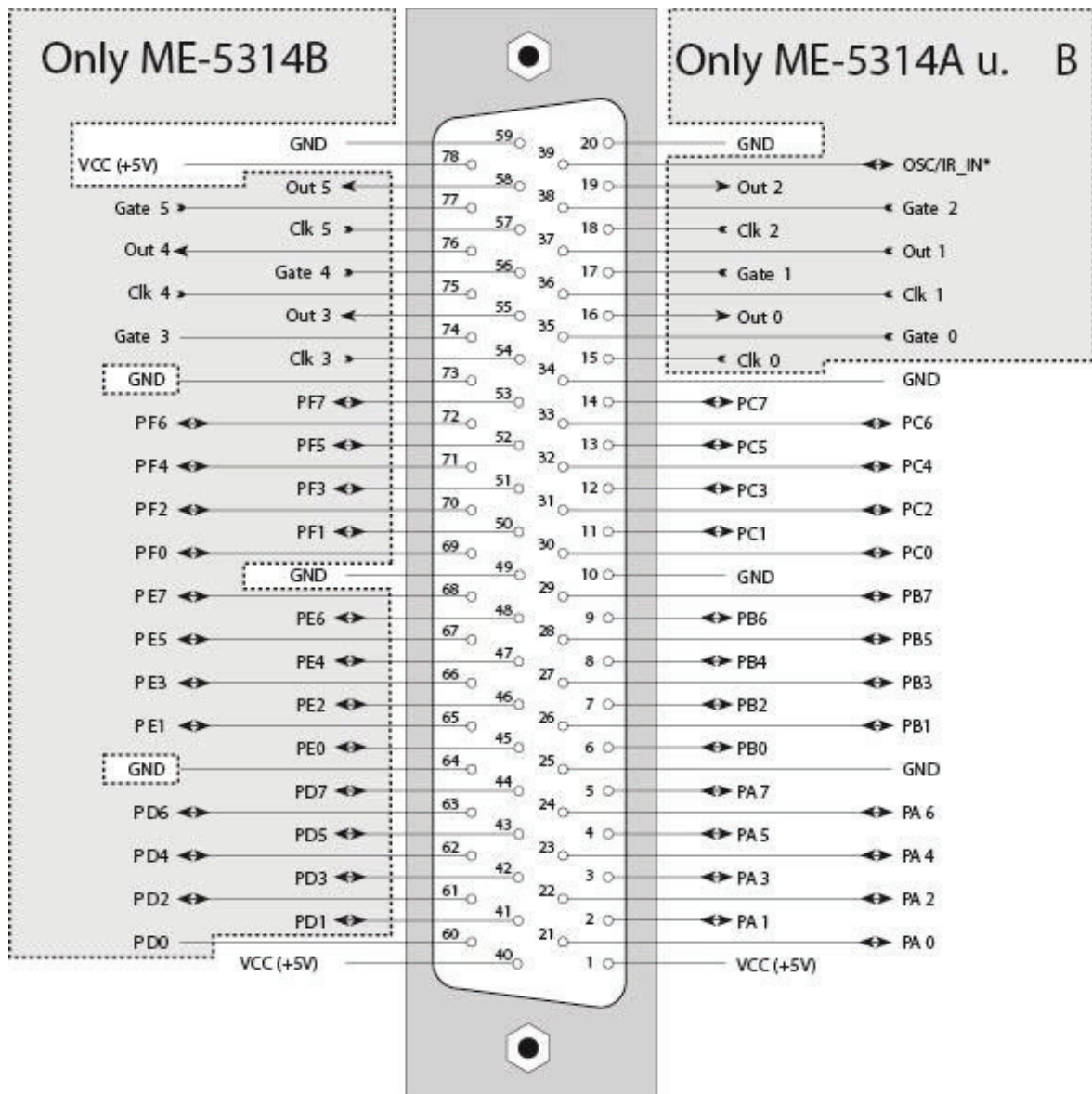
VCC loading at the D-Sub connector: 200 mA	
Operating temperature	0...70 °C
Storage temperature	-40...100 °C
Relative humidity	20...55 % (non-condensing)

CE Certification

EMC-Directive	89/336/EMC
Emission	EN55022
Immunity	EN50082-2

Pinout

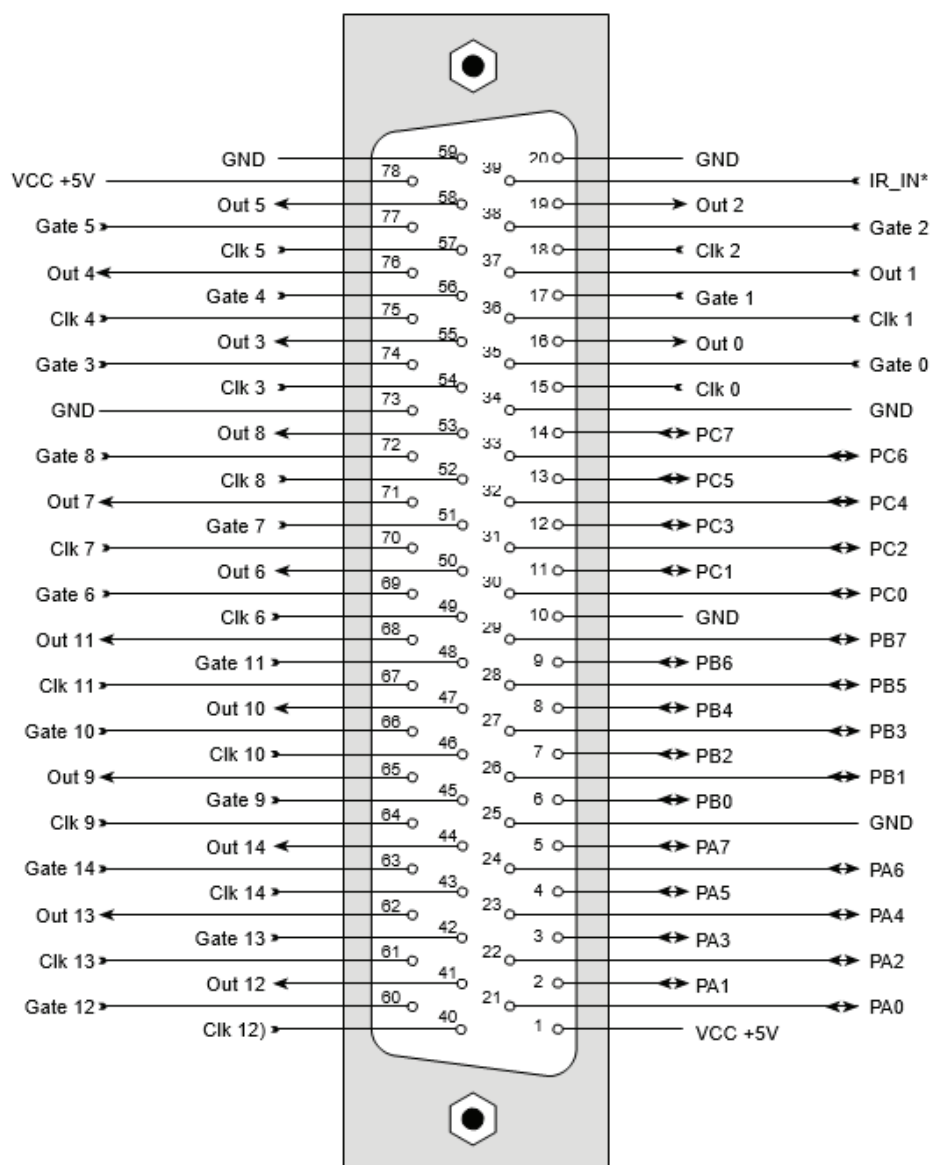
ME-5314A/B



Picture 6: 78-pin female D-Sub connector ME-5314A/B

*Only in operation on ME-5314A/B. When programming with the ME-iDS this pin is always an interrupt input.

B2 ME-5314C



Picture 7: Pinout of the 78-pin female D-Sub ME-5314C