

advanced rugged computers

jürgen fedrich



rugged

aggressive price free premium support legacy 1553 solution IBIT PBIT CBIT



software compatibility hardware compatibility

DO-178 on request

The RPMC-1553-1 is offering up to 4 MIL-STD-1553 compatible channels. It is available as air cooled and conduction cooled versions of industry standard PMC modules.

Already during its design phase special attention has been paid to **flexibility** and **BIT**. The hardware design is straight forward using premium DDC chipsets and is allowing easy customisation of the interfaces/pin-outs. Further functionality can be easily added on request.

The software package delivers drivers for various OS, API and full BIT support.

Beside the high level API customer can obtain for free a legacy API which allows customer to reuse its existing software interface.

The software design includes full BIT support, i.e. beside standard IBIT the module provides full support of **CBIT** and **PBIT** too!

Due to its vast flexibility in hardware and software the RPMC-1553-1 is very well suited for **End-Of-Life** replacements, **second-source-supplier** or general backup solutions.

Further typical applications include Avionics, Radar, Sonar, Data Recording in hard real time environments such as aerospace, naval or land based platforms.

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PMC	compatible to	MIL-STD-1553A, -B, STANAG3838 IEEE P1386, VITA-39, ANSI/VITA 35-2000
	channels	up to 4 configurable as BC/RT/BM and extended RT/BM
	clocks	10,12,16,20MHz
	coupling	direct or matched transformer couplers
	timer option	additional 48bit Cyclone II timer
software	OS	VxWorks, Linux, Lynx OS, Integrity, Windows 2000/XP
	full BIT	IBIT and additionally high level CBIT and PBIT!
	API	high level API
	legacy API	legacy 1553 solution, allowing use of legacy software with our new 1553 hardware solutions (free of charge
		customer can keep his software unchanged
		DO 178 software on request
hardware	premium DDC chipsets	compliancy to 1553 protocol requirements given by using qualified premium DDC controllers
		pinout and/or DDC chipsets can be customised to
		moot quetomore intertede poode (on request)
		meet customers interface needs (on request)
	forms to store	customer can keep his hardware unchanged
mechanical	form factor	customer can keep his hardware unchanged PMC
mechanical	size	PMC 174mmx149mm
	size weight	PMC 174mmx149mm 150 gr
mechanical electrical	size weight power dissipation	PMC 174mmx149mm 150 gr 2W (single channel)
	size weight	PMC 174mmx149mm 150 gr
electrical	size weight power dissipation	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged)
electrical	size weight power dissipation storage temperature	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C (rugged) 0 °C + 70 °C (commercial)
electrical	size weight power dissipation storage temperature	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged)
electrical	size weight power dissipation storage temperature operating temperature	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis
electrical	size weight power dissipation storage temperature operating temperature vibration	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis
electrical	size weight power dissipation storage temperature operating temperature vibration shock	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis
electrical environmental	size weight power dissipation storage temperature operating temperature vibration shock humidity	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 40g's, 11 msec, half sine, 3 pulses, 6 axis 10% 90%, non condensing
electrical environmental flammability	size weight power dissipation storage temperature operating temperature vibration shock humidity UL 94V-0	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 40g's, 11 msec, half sine, 3 pulses, 6 axis 10% 90%, non condensing UL recognised manufacturer
electrical environmental flammability workmanship	size weight power dissipation storage temperature operating temperature vibration shock humidity UL 94V-0 IPC-A-610D, class 3	PMC 174mmx149mm 150 gr 2W (single channel) -40 °C +85 °C -40 °C + 85 °C (rugged) 0 °C + 70 °C (commercial) 2grms, 100 Hz 500Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 14grms, 15Hz 2000Hz, 1 hr/axis 40g's, 11 msec, half sine, 3 pulses, 6 axis 10% 90%, non condensing UL recognised manufacturer

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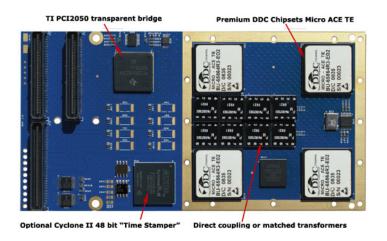
configuration	options	comments	
channels	1,2,3,4	configurable as BC/RT/MT and extended RT/BM	
48bit timer	yes / no	standard 16 bit chipset or add. Cyclone II 48 bit	
coupling	direct/transformer	direct or matched transformers coupling	
style	commercial/rugged	rugged style includes conformal coating	
OS	please indicate	LynxOS, Linux, Windows Integrity, XP, VxWorks.	
customisation	please indicate	new pin-out necessary to match existing interface? software customisation? DO-178 requested? other OS? hardware customisation? other pin-out?	
quantity	please indicate	no minimum order quantity (MOQ)	
free additions powered by arc	support consultancy	free 1553 support! free 1553 consultancy!	

Although the PMC is bundled with a very impressive set of features like:

- √ full BIT
- √ full customisation
- √ premium DDC chips
- √ free support
- √ free consultancy

the costs have been held surprisingly down. Please contact us to determine your appropriate configuration and to provide you a quote:

www. a d v a n c e d -rugged-computers.com



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