


## DCO 1728 om termerste

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.

| Datasheet | Issue 2 | 04.Feb.2010 |
| :---: | :---: | :---: |
| RPMC-1553-1 | RPMC-1553-1_data_sheet_Issue_2 <br> © arc 2010 | page 1 of 3 |


| CrC | advanced rugged computers |  | jürgen fedrich |
| :---: | :---: | :---: | :---: |
| PMC | compatible to | MIL-STD-1553A, -B, STANAG3838 IEEE P1386, VITA-39, ANSI/VITA 35-2000 |  |
|  | channels | up to 4 configurable as $B C / R T / B M$ 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) $\pm$ customer can keep his software unchanged $\boldsymbol{m}$ |  |
|  |  | 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 meet customers interface needs (on request) $\pm$ customer can keep his hardware unchanged m |  |
| mechanical | form factor | PMC |  |
|  | size | $174 \mathrm{mmx149mm}$ |  |
|  | weight | 150 gr |  |
| electrical environmental | power dissipation | 2W (single channel) |  |
|  | storage temperature | $-40{ }^{\circ} \mathrm{C} \ldots+85^{\circ} \mathrm{C}$ |  |
|  | operating temperature | $\begin{aligned} &-40^{\circ} \mathrm{C} \ldots+85^{\circ} \mathrm{C} \text { (rugged) } \\ & 0^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C} \text { (commercial) } \end{aligned}$ |  |
|  | vibration | 2grms, $100 \mathrm{~Hz} \ldots 500 \mathrm{~Hz}$, 1 hr/axis $14 \mathrm{grms}, 15 \mathrm{~Hz} . .2000 \mathrm{~Hz}, 1 \mathrm{hr} /$ axis |  |
|  | shock | 40g's, 11 msec , half sine, 3 pulses, 6 axis |  |
|  | humidity | 10\% ... $90 \%$, non condensing |  |
| flammability workmanship keying MTBF | UL 94V-0 | UL recognised manufacturer |  |
|  | IPC-A-610D, class 3 | IPC-A-610D, class 3 |  |
|  | 3.3 V and 5V |  |  |
|  | 752,862 hours | ground benign, 4 channels |  |
|  | 1 year |  |  |
| warranty Data | Sheet | Issue 2 | 04.Feb. 2010 |
| RPMC- | $1553-1$ | RPMC-1553-1_data_sheet_Issue_2 | page 2 of 3 |



