PTC04 Hardware Release Notes

Release Contents

Hardware Package:
PTC04 Programmer

Included Documentation:
Ptc04_DataSheet.pdf

Contents

Release Contents........................................................................................................... 1
Release History............................................................................................................. 3

V 2.6 .............................................................................................................................. 3
Purpose ......................................................................................................................... 3
Revisions ...................................................................................................................... 3
Implementation ............................................................................................................ 3
Corrections .................................................................................................................. 3
Possible impact ........................................................................................................... 3
Known Issues ............................................................................................................... 3
Documentation ........................................................................................................... 3

V 2.5 .............................................................................................................................. 4
Purpose ......................................................................................................................... 4
Revisions ...................................................................................................................... 4
Corrections .................................................................................................................. 4
Possible impact ........................................................................................................... 4
Known Issues ............................................................................................................... 4
Documentation ........................................................................................................... 4
Release History

V 2.6
Date: 24 November 2016

Purpose
The purpose of this redesign is to improve the systems robustness.

Revisions
PTC04 Revision: V 2.6
Ptc04_DataSheet.pdf Revision: 1.5

Implementation
- Implementation of additional protection on the USB and RS232 connection.

Corrections
- Modification of the input buffer of the measuring unit.
- Modification in the connection of the common mode choke filters between the systems supplies. The connection is changed from double pole to single pole connection. All ground planes are directly connected to the earth connection.

Possible impact
The modifications made have no impact on the functionality of the PTC04.

Known Issues
When using the PTC04 in combination with external equipment or other PTC04’s, it is very important to have a good solid ground connection between the different appliances. A bad ground connection between appliances and the PTC04 can cause damage to the PTC04. The measuring unit and the digital channels of the PTC04 are sensitive to level shifts.

Documentation
- The documentation has been reviewed.
- There are no changes in the functionality of the PTC04.
V 2.5
Date: 7 December 2015

Purpose
The purpose of this redesign is to replace obsolete components on the PTC04 main board and to remove some unused components.

Revisions
PTC04 Revision: V 2.5
Ptc04_DataSheet.pdf Revision: 1.5

Corrections
- Replacement of the Fast DAC of PPS4 (U11).
- Replacement of the pin protection circuit on the analog and digital connector.
- Removal of unused pin headers: LCD, J10, J11.
- Removal of the KEY connection.
- Removal of the LED indicator for the relays on the daughter board.

Possible impact
The replacement of the Fast DAC of PPS4 and the pin protection circuit on the analog and digital connector has no impact on the performance of the PTC04.

Known Issues
When using the PTC04 in combination with external equipment or other PTC04’s, it is very important to have a good solid ground connection between the different appliances. A bad ground connection between appliances and the PTC04 can cause damage to the PTC04. The measuring unit and the digital channels of the PTC04 are sensitive to level shifts.

Documentation
- The documentation has been reviewed.
- There are no changes in the functionality of the PTC04.
V 2.4
Date: 18 October 2010

Purpose
The purpose of this redesign is to replace obsolete components on the PTC04 main board.

Revisions
PTC04
Rev: V 2.4
Ptc04_DataSheet.pdf
Rev: 1.5

Corrections
- Replacement of the 2.5 volt reference supply.

Possible impact
The replacement of the 2.5 volt reference supply has no impact on the performance of the PTC04.

Known Issues
When using the PTC04 in combination with external equipment or other PTC04’s, it is very important to have a good solid ground connection between the different appliances. A bad ground connection between appliances and the PTC04 can cause damage to the PTC04. The measuring unit and the digital channels of the PTC04 are sensitive to level shifts.

Documentation
- The documentation has been reviewed.
- There are no changes in the functionality of the PTC04.
V 2.3
Date: 14 March 2005

Purpose
The purpose of this redesign is to create extra cooling capacity for the 15V regulator.

Revisions
PTC04 Revision: V 2.3
Ptc04_DataSheet.pdf Revision: 1.3

Corrections
- 15V supply: create cooling area for LM317
- J1 move position to PPS4 area
- Change layout PPS4 (no components where changed)
- Disconnect +5V_ana from analog connector

Possible impact
Developers can no longer use the +5V analog supply. All the Daughter Boards, designed by Melexis, are checked. But own designs might need adjustments.

Known Issues
When using the PTC04 in combination with external equipment or other PTC04’s, it is very important to have a good solid ground connection between the different appliances. A bad ground connection between appliances and the PTC04 can cause damage to the PTC04. The measuring unit and the digital channels of the PTC04 are sensitive to level shifts.

Documentation
- The documentation has been update according to the added and changed functionality.
V 2.2
Date: 20 July 2004

Purpose
The purpose of the redesign is to change the power switch to a more robust type and add an extra supply connector for a 19” rack supply.

Revisions
PTC04 Revision: V 2.2
Ptc04_DataSheet.pdf Revision: 1.0

Implementation
- Extra supply connector on PCB

Corrections
- Power switch replaced robust model
- J1: swap pin 1 en pin 2
- New footprint LM317 (+15V regulator)

Possible impact
Unknown
V 2.1
Date: 10 June 2004

Purpose
The purpose of this redesign is to implement a power switch on the PCB, create a High sensitivity range for measurements below 7.5V, ground the casing of the PTC04 for extra shielding and activate the Current limiters.

Revisions
PTC04 Revision: V 2.1
Ptc04_DataSheet.pdf Revision: 1.0

Implementation
- ADC range
- RS232 header on PCB
- Supply switch

Corrections
- Current limiters
- Grounding chassis
- J9, double row JTAG connector, removed
- Rename J12 to J1
- Smaller reset button
- LM317: TO-92 package changed to DPAK package (+15V regulator)

Possible impact
Developers using the current limiters should check the minimum hardware revision.
V 2.0
Date: 3 March 2004

Purpose
Initial release of the PTC04 programmer

Revisions
PTC04  
Revision: V 2.0
Ptc04_DataSheet.pdf  
Revision: 1.0
Contact

For the latest version of this document, go to our website at www.melexis.com.

For additional information, please contact our Direct Sales team and get help for your specific needs:

<table>
<thead>
<tr>
<th>Region</th>
<th>Telephone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe, Africa</td>
<td>+32 13 67 04 95</td>
<td><a href="mailto:sales_europe@melexis.com">sales_europe@melexis.com</a></td>
</tr>
<tr>
<td>Americas</td>
<td>+1 603 223 2362</td>
<td><a href="mailto:sales_usa@melexis.com">sales_usa@melexis.com</a></td>
</tr>
<tr>
<td>Asia</td>
<td></td>
<td><a href="mailto:sales_asia@melexis.com">sales_asia@melexis.com</a></td>
</tr>
</tbody>
</table>

Disclaimer

The information furnished by Melexis herein ("Information") is believed to be correct and accurate. Melexis disclaims (i) any and all liability in connection with or arising out of the furnishing, performance or use of the technical data or use of the product(s) as described herein ("Product") (ii) any and all liability, including without limitation, special, consequential or incidental damages, and (iii) any and all warranties, express, statutory, implied, or by description, including warranties of fitness for particular purpose, non-infringement and merchantability. No obligation or liability shall arise or flow out of Melexis’ rendering of technical or other services.

The Information is provided “as is” and Melexis reserves the right to change the Information at any time and without notice. Therefore, before placing orders and/or prior to designing the Product into a system, users or any third party should obtain the latest version of the relevant information to verify that the information being relied upon is current.

Users or any third party must further determine the suitability of the Product for its application, including the level of reliability required and determine whether it is fit for a particular purpose.

The Information is proprietary and/or confidential information of Melexis and the use thereof or anything described by the Information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights.

This document as well as the Product(s) may be subject to export control regulations. Please be aware that export might require a prior authorization from competent authorities.

The Products sold by Melexis are subject to the terms and conditions as specified in the Terms of Sale, which can be found at https://www.melexis.com/en/legal/terms-and-conditions.

This document supersedes and replaces all prior information regarding the Product(s) and/or previous versions of this document.

Melexis NV © - No part of this document may be reproduced without the prior written consent of Melexis. (2016)

ISO/TS 16949 and ISO14001 Certified