

PTC04

Hardware Release Notes

Release Contents

Hardware Package:

PTC04 Programmer

Included Documentation:

PTC04 datasheet

Ptc04_DataSheet.pdf

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Release History

V 2.7

Date: 27 October 2020

Purpose

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

Revisions

PTC04	Revision: V 2.7
Ptc04_DataSheet.pdf	Revision: 1.7

Implementation

- Implementation of additional EMC measures on the USB, RS232 and SUB-D (DUT) connection.
- Implementation of power connector and earth connections on back panel.

Corrections

- Removal of the power connector and screw terminals inside the housing.
- Change back panel layout for power connector, earth connections and the bolds of the SUB-D (DUT) connector.
- Change of screw types of the housing.
- Change to press fitted bolds for the handle of the housing.

Possible impact

The modifications made have no impact on the operational functionality of the PTC04. Users can however no longer use the internal screw terminals or the internal power supply connector.

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.
- Updates were made to the PTC04 datasheet and Get Started with PTC04.

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	Revision: V 2.4
Ptc04_DataSheet.pdf	Revision: 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
Ptc04_DataSheet.pdf

Revision: V 2.2

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
Ptc04_DataSheet.pdf

Revision: V 2.1
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
Ptc04_DataSheet.pdf

Revision: V 2.0
Revision: 1.0

Contact

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