## NEW Firmware Release -> V 1.0 XBMC support UPS Pico V1.0 04 09 2015 code 0x38

Full Tested with A/B, B+/A+ and Pi2 B

For the A+ model the HV1.1 is needed to use spacer of 12 mm.

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Added Features, Bug fixes

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- 1. Internal changes making system more robust.
- 2. Added a mechanism that recognizes automatically and full track of Raspberry Pi shutdown and reboot process initiated by user i.e. from SSH console
- Shutdown done via console command of the Raspberry Pi is recognized by PIco, and it is going to the low powering mode. Fast blinking UPS LED will inform user about it within the whole shooting down process (about 50 seconds) monitoring. If you have connected external RS232 to pins 14 and 15 user can see appropriate messages, if Raspberry Pi RS232 is free.
- Reboot done via console command of the Raspberry Pi is recognized by PIco, and it is going to the low powering mode. Fast blinking UPS LED will inform user about it within the whole shooting down process (about 50 seconds) monitoring. If you have connected external RS232 to pins 14 and 15 user can see appropriate messages, if Raspberry Pi RS232 is free.
- Both actions are valid with battery powering and cable powering
- During both actions a cable power loss protection is provided
- The above shutting down process time out is 32 + 18 Seconds = 50 seconds
- The time of 50 seconds is calculated based on the FSSD\_timeout register, actually default set to 32 seconds, so if user need to increase the time where PIco is waiting for the Raspberry Pi Reboot need to increase the FSSD\_timeout register. This will cause also increase of the System Shutdown time where PIco is waiting for. Only experienced users can play with such registers. If for any reason, some parameters will be changed, and cannot restore, use hand invoked system defaults:

Press the UPSR, then having pressed UPSR, press the KAYB, then having both pressed, release the UPSR, and then release the KAYB. UPS PIco will reprogram its default values

- The above time of 50 seconds is available for Raspberry Pi complete shutdown and/or reboot
- For reboot action (any type: RPi console or PIco) action a Gold Plated Reset Pin is required

- If the Gold Plated Reset Pin is not available, use UPS PIco normally without any problem as an UPS with all other features, but remember to avoid rebooting initiated by console command, as also system restart by the FSSD button. These options will be not working properly without the Gold Plated Reset Pin assembled
- 3. When system starts up, due to rebooting or for the first time, protection of cable power loss is provided even if RPi is not running yet, so cable power lose will not stop these processes
- 4. A small bug with I2C detection during Raspberry PI reboot has been corrected, and now I2C is recognized all the time
- 5. The current consumption has been improved in the Low powering mode
- 6. New Firmware now, automatic recognize the UPS PIco hardware version is running on and adopting the itself to current version
- 7. The fssd\_batime variable default value has been changed to 45 seconds, so when cable power loss; the system will be running for 45 seconds. If different value is needed, the user should re-program this register.
- 8. The picofu.py has been slightly improved by increasing the timeout for RS232, as some customers reported that it is needed mainly for the B+.

This version is still without Event Driven RTC based ON/OFF scheduler, without XTEA encryption as also FAN automation, however prepared to host above features and very well tested and hope bugs free. In about one week, we will release the version with above functionality.

It is recommended to all, to upload this version to your PIco (for any hardware) as cumulative bugs has been recognized and corrected collected for the last couple of months.

The most important feature is that the PIco is now recognizing when the user shutdown the Raspberry Pi, and goes to low powering mode.