User's Manual

This product is not meant for general use. It is intended for connection in a single embedded system.

This device communicates with a BacTrack Breathalyzer over the 30 pin connecter interface. A proprietary UART communication protocol is used and it's details are specified in "Smartphone_Protocol_Rev2.7.xlsx".

The following image describes the pinout for the 30 pin connector interface for this module.



Connector Details:

The mezzanine connector used on this module is the Panasonic AXK6F30547YG. The mating connector used for interfacing to this product is the Panasonic AXK5F30537YG.

The mating circuitry should interface to the module using a circuit similar to the following:



Brief explanation of signal characteristics:

- LED connections are open drain and should be connected as shown above.

- SHUTDOWN has a logic high minimum of 1.6V:

- SHUTDOWN : High (power on) (1.6V ~ 2.1V)

- SHUTDOWN $\,$: Low (power is shutting down 50ms after high -> low transition) $\,$ (0V \sim 0.5V)

- TX 2.1V : High (1.6V ~ 2.1V)
- TX 2.1V : Low (0V ~ 0.5V)
- RX 2.1V : High (2.1V)
- RX 2.1V : Low (0V ~ 0.5V)
- VCC_2.1V should be used only for external level translation

Other Operation Notes:

- Current should be limited to below 35mA going into the LED Cathode signals.

- V_USB should be provided in the range of 4.35V to 26V

- A single 300mAh Lithium-Ion cell should be connected to V_BAT and should be present during all operation of the device.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Purple Communications, Inc, may void the user's authority to operate the equipment.