

## Instrument Security Procedures

### Model:

Fluke BT508, Fluke BT510, Fluke BT520, Fluke BT521

### Product Name:

Battery Analyzer

### Instrument Description:

The Fluke BT521 (as an example) Battery Analyzer is a multifunctional meter designed for the test and measurement of a stationary battery system. The Product can measure the battery internal resistance and voltages. These measurements can be used to determine the overall condition of the system. It can also measure electrical parameters for battery system maintenance, including dc voltage up to 1000 V, ac voltage up to 600 V, and ripple voltage.

### Memory Description:

#### Display Board

- U7, MICROCONTROLLER, STM32F205ZGT6, ARM Cortex-M3 MCU with 1 Mbyte Flash, Up to 128 + 4Kbytes of SRAM, This flash is non-volatile memory containing operating code for the product. The RAM is used for Interrupt handle and peripheral device DMA buffer, it is not accessible to the user and its contents are lost after power off.
- U15, SRAM, ISSI IS62WV51216, 512Kx16bit, The RAM is volatile memory that is used for program volatile variables and stack and Display Frame Buffer. it is not accessible to the user and its contents are lost after power off.
- U9, Flash, Microchip SST39VF3201B, 2M x16bit Nor Flash, This flash is non-volatile memory containing File system data for the product, it is not accessible to the user.
- U10, FRAM, Ramtron 256-Kbit (32 K × 8) F-RAM Memory, This FRAM is non-volatile memory containing File system cache data for the product, it is not accessible to the user.

#### Measure Board

U19, Microcontroller, TI MSP430F47163, 92KB Flash, 4KB RAM, This flash is non-volatile memory containing operating code for the product and calibrated data, The RAM is volatile memory that is used for program volatile variables and stack, it is not accessible to the user and its contents are lost after power off.

#### BTL2x Handle

- U1, Microcontroller, TI MSP430F448, 48kB Flash, 2kB RAM. This flash is non-volatile memory containing operating code for the product, The RAM is volatile memory that is used for program volatile variables and stack, it is not accessible to the user and its contents are lost after power off.
- U4, Serial Flash, Winbond W25Q64FVZP, 64Mbit. The flash is non-volatile memory containing audio data, it is not accessible to the user.

**BTL1x Handle**

- U1, Microcontroller, TI MSP430F2370, 32kB Flash, 2kB RAM, This flash is non-volatile memory containing operating code for the product, The RAM is volatile memory that is used for program volatile variables and stack, it is not accessible to the user and its contents are lost after power off.

**Memory Cleaning Instructions:**

RAM data will be lost after power off, User sensitive information is stored in Display board U9 and U10. To securely clean this user sensitive information, perform the following operations:

1. With the Product turned on, push Setup.
2. Use the navigation keys to select General > Factory Mode.
3. Push F1 (Reset) and F1 (Confirm) to erase all saved data.