Solar Panel Charger Station
Block Diagram

Buck Converter
- buck_oscillation_asig
- lead-acid_charge_dcpwr
- solar_panel_envin
- buck relay shut-off

Voltage, Current and Thermal Sensors
- lead-acid_temp_asig
- battery_temp_asig
- solar_panel_envin
- sense_data
- buck relay shut-off

MPPT Algorithm & Shutoff Signals
- controller_dcpwer
- lead-acid_temp_asig
- battery_temp_asig
- distributor_dcpwr
- buck_oscillation_asig
- distributor relay shut-off

Lead-Acid Battery with Charge Protections
- controller_dcpwer
- lead-acid_temp_asig
- battery_temp_asig

Charger Distributor & Battery Housing
- distributor relay shut-off
- battery_select switch_envout
- battery Envout
- USB_dcpwr

USB Negotiator
- USB_device_envout
- controller_dcpwer
- visual_shutoff_notification
- panel_character_temp

Visual Output
- phone_app_envout

Enclosure
- solar_panel_envin

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