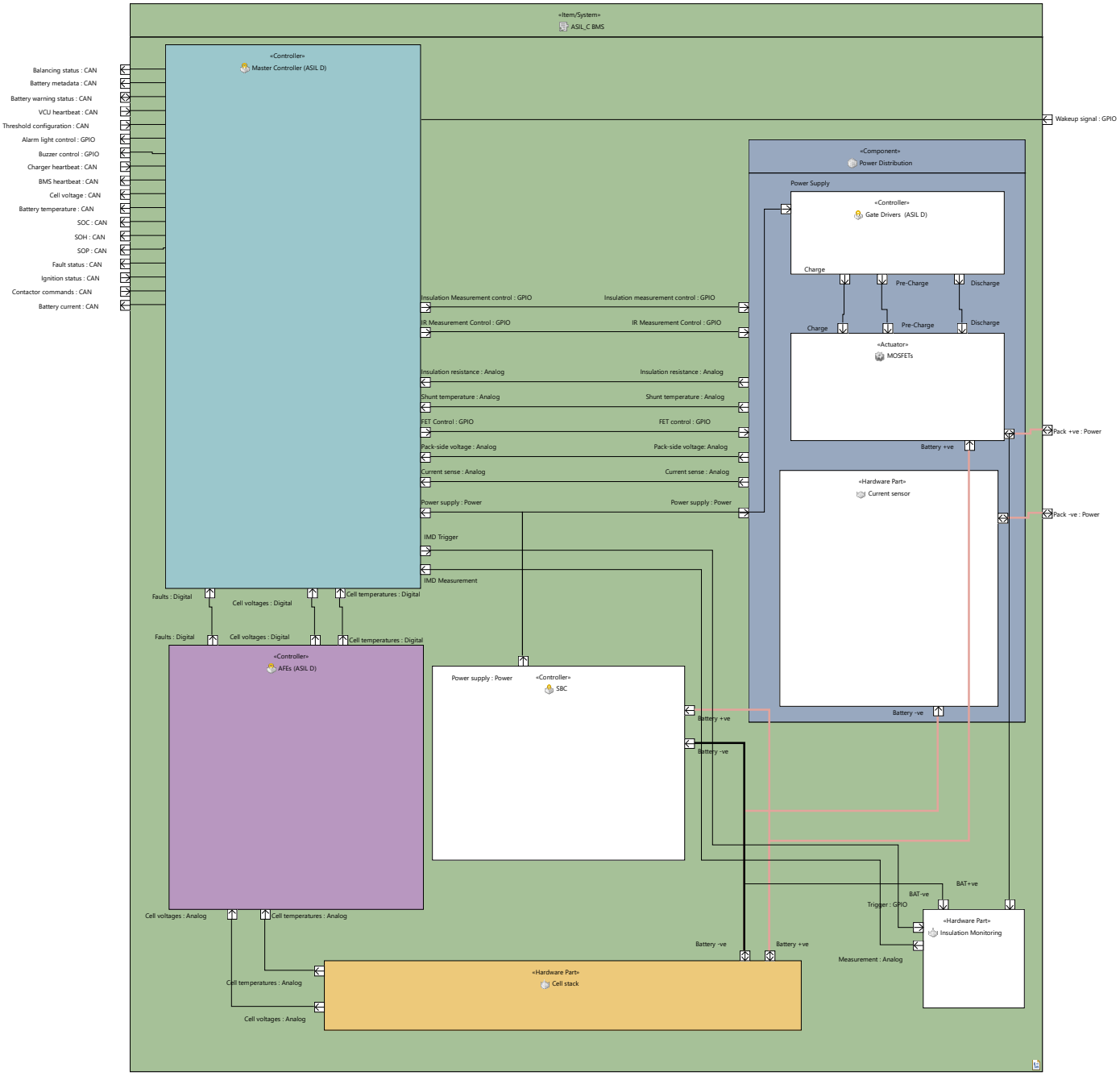
«Item/System»
ASIL_C BMS
«Controller»
Master Controller (ASIL D)
Balancing status : CAN
Battery metadata : CAN
Battery warning status : CAN
VCU heartbeat : CAN
Threshold configuration : CAN
Alarm light control : GPIO
Buzzer control : GPIO
Charger heartbeat : CAN
BMS heartbeat : CAN
Cell voltage : CAN
Battery temperature : CAN
SOC : CAN
SOH : CAN
SOP : CAN
Fault status : CAN
Ignition status : CAN
Contactor commands : CAN
Battery current : CAN
Wakeup signal : GPIO
«Component»
Power Distribution
Power Supply
«Controller»
Gate Drivers (ASIL D)
Charge
Pre-Charge
Discharge
Insulation Measurement control : GPIO
Insulation measurement control : GPIO
IR Measurement Control : GPIO
IR Measurement Control : GPIO
«Actuator»
MOSFETs
Insulation resistance : Analog
Insulation resistance : Analog
Shunt temperature : Analog
Shunt temperature : Analog
FET Control : GPIO
FET control : GPIO
Pack-side voltage : Analog
Pack-side voltage: Analog
Current sense : Analog
Current sense : Analog
Pack +ve : Power
Battery +ve
«Hardware Part»
Current sensor
Power supply : Power
Power supply : Power
Pack -ve : Power
IMD Trigger
IMD Measurement
Battery -ve
Faults : Digital
Cell voltages : Digital
Cell temperatures : Digital
«Controller»
AFEs (ASIL D)
Power supply : Power
«Controller»
SBC
Battery +ve
Battery -ve
BAT+ve
BAT-ve
Trigger : GPIO
«Hardware Part»
Insulation Monitoring
Measurement : Analog
Cell voltages : Analog
Cell temperatures : Analog
«Hardware Part»
Cell stack