Orion BMS Custom Messages for use with HPEVS

Address ID	Length	Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
0x300	8	Low Cell Voltage	Low Cell Voltage High Byte	High Cell Voltage	High Cell Voltage High Byte	Pack Current	Pack Current High Byte	Pack Amphours	Pack Amphours High Byte
0x301	8	Pack SOC	High Temperature	Low Temperature	12v Supply	12v Supply High Byte	Custom Flag	n/a	n/a

		Bit #1	Bit #2	Bit #3	Bit #4	Bit #5	Bit #6	Bit #7	Bit #8
Custon	n Flag	Charge Interlock	DTC: Internal Comm Fault	DTC: Low Cell Voltage Fault	DTC: Current Sensor Fault	DTC: Internal Memory Fault	DTC: Internal Logic Fault	DTC: High Voltage Isolation Fault	Error (Mil) Output

Notes:

CAN Bus Baud rate: 250 kbps Message setting transmit speed for mailboxes 0x300 and 0x301: 104 ms

byte order: Big Endian

Address 0x300

Byte0: low cell voltage set by multiply by 1 then divide by 10

Byte1: low cell voltage high byte

Byte2: high cell voltage set by multiply by 1 then divide by 10

Byte3: high cell voltage high byte

Byte4: Pack current set by multiplying by 1 then divide by 1; signed value

Byte5: Pack current high byte

Byte6: Pack Amphours set by multiplying by 1 then divide by 1

Byte7: Pack Amphours high byte

Address 0x301

Byte0: Pack SOC value set by multiplying by 1 then divide by 2
Byte1: High Temperature set by multiplying by 1 then divide by 1
Byte2: Low Temperature set by multiplying by 1 then divide by 1
Byte3: 12 volt supply set by multiplying by 1 then divide by 1

Byte4: 12 volt supply, high byte.

Byte5: Custom Flag #2

Byte6: not used

Byte7: not used