Thunderboard Sense

Thunderboard Sense module interacts with SiLabs Thunderboard Sense device via BLE, periodically acquires telemetry (3D device orientation and acceleration, temperature, humidity, pressure, UV index, ambient light, sound level, air quality and buttons state) and controls 4 onboard RGB LEDs.

 $\textbf{Implementing class:} \verb|com.arrow.selene.device.ble.thunderboard.sense.ThunderboardSenseModule| \\$

OS dependency: Linux systems only (due to bluetooth stack implementations)

Requirements: bluez v5.42+, BLE adapter

Info:

Name	Data type	Unit of measurement	Valid values	Default value	Description
bleInterface	string	N/A	N/A	N/D	Defines name of bluetooth interface (e.g. hci0)
bleAddress	string	N/A	N/A	N/D	Defines MAC address of device (e.g. FA:73:B2:D1:FD:C7)

Properties:

Name	Data type	Unit of measurement	Valid values	Default value	Description
retryInterval	integer	milliseconds	0-2147483647 (0x7fffffff)	N/D	Defines interval of checking GATT connectivity. Makes sense only in case if useDbus=false
useDbus	boolean	N/A	true/false	false	Enables D-Bus to be used to obtain data instead of direct parsing of received packets
HumiditySensor/enabled	boolean	N/A	true/false	false	Enables humidity sensor
TemperatureSensor/enabled	boolean	N/A	true/false	false	Enables temperature sensor
UvSensor/enabled	boolean	N/A	true/false	false	Enables UV sensor
LightSensor/enabled	boolean	N/A	true/false	false	Enables ambient light sensor
KeysSensor/enabled	boolean	N/A	true/false	false	Enables keys sensor
AccelerationSensor/enabled	boolean	N/A	true/false	false	Enables accelerator sensor
OrientationSensor/enabled	boolean	N/A	true/false	false	Enables orientation sensor
RgbLedsControl/enabled	boolean	N/A	true/false	false	Enables ability to control RGB LEDs
PressureSensor/enabled	boolean	N/A	true/false	false	Enables pressure sensor
SoundSensor/enabled	boolean	N/A	true/false	false	Enables sound sensor
CO2Sensor/enabled	boolean	N/A	true/false	false	Enables CO2 sensor
TvocSensor/enabled	boolean	N/A	true/false	false	Enables volatile organic compounds sensor