MQTT_Module

Module Responsibility :

- Establishing and maintaining a connection with the MQTT Broker

- Publishing data to specific MQTT topics

- Subscribing to MQTT topics to receive data

- Forwarding received data to the application layer through a callback mechanism

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<<block>>

MQTT_Module

<<Parameters>>

Static Config Parameters :
    #define MQTT_DEBUG_ENABLED
    #define MQTT_BROKER_URI
    #define MQTT_CLIENT_ID
    #define MQTT_USERNAME
    #define MQTT_PASSWORD

<<Function>>

~Mqtt_Init(void) : void

~Mqtt_SetDataCallback(Mqtt_DataCallback callback):void

~out:Mqtt_Publish (const char *topic, const char *data,
           int qos, int retain): void

~out:Mqtt_Subscribe(const char *topic, int qos):void

~out:Mqtt_DataCallback

Module Flowchart

Start

MQTT_Init

Init Mqtt Client

Client Valid ?
Yes — No

Register Event Handler

Start MQTT Client

Wait for Events

MQTT_EVENT_DATA ?
Yes

Disconnect ?
No

Copy Topic & Payload

Callback Registered ?
No — Yes

Call User Callback

End