

Initialization of MGC3130

SET_RUNTIME_PARAMETER

MESSAGE OVERVIEW

Header				Payload			
Msg. Size	Flags	Seq.	ID	RuntimeParameterID	Reserved	Argument0	Argument1
1 Byte	1 Byte	1 Byte	1 Byte	2 Bytes	2 Bytes	4 Bytes	4 Bytes
0x10	n.a.	n.a.	0xA2	see description below			

Message from Master to MGC3130

The following messages must be send to setup / initialize the sensor for our application

MESSAGE OVERVIEW																	
Bytes to be send	Header				Payload												
	MsgNr.	MsgSize	Flags	Seq.	ID	RuntimeParameterID	Reserved	Argument0				Argument1				Description	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th
	1	0x10	0x00	0x00	0xA2	0x97	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x08	0x00	0x00	0x00
	2	0x10	0x00	0x00	0xA2	0x97	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x01	0x00	0x00	0x00
	3	0x10	0x00	0x00	0xA2	0x90	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x20	0x00	0x00	0x00
	4	0x10	0x00	0x00	0xA2	0x85	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x7F	0x00	0x00	0x00
	5	0x10	0x00	0x00	0xA2	0xA0	0x00	0x00	0x00	0x10	0x00	0x00	0x00	0xFF	0xFF	0x00	0x00
	6	0x10	0x00	0x00	0xA2	0xA1	0x00	0x00	0x00	0x10	0x00	0x00	0x00	0xFF	0xFF	0x00	0x00

SYSTEM_STATUS

MESSAGE OVERVIEW

Header				Payload			
Msg. Size	Flags	Seq.	ID	MsgID	MaxCmdSize	ErrorCode	Reserved
1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	2 Bytes	4 Bytes
0x10	n.a.	n.a.	0x15	see description below			

Message from MGC3130 to Master

After receiving a message of the type SET_RUNTIME_PARAMETER,
the MGC3130 responds with a message SYSTEM_STATUS to indicate if the requested Runtime-Parameter was set or not.

MESSAGE OVERVIEW																	
Bytes to be received	Header				Payload												
	MsgNr.	MsgSize	Flags	Seq.	ID	MsgID	MaxCMDSize	ErrorCode				Reserved				Response to:	
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th
	1	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
	2	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
	3	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
	4	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
	5	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
	6	0x10	0x00	0x00	0x15	0xA2	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00

SENSOR_DATA_OUTPUT

MESSAGE OVERVIEW

Header				Payload			
Size	Flags	Seq.	ID	DataOutputConfigMask	TimeStamp	SystemInfo	Variable Depending on DataOutputConfigMask
1 Byte	1 Byte	1 Byte	1 Byte	2 Bytes	1 Byte	1 Byte	Variable Depending on DataOutputConfigMask
variable	n.a.	n.a.	0x91	see description below			

Message from MGC3130 to Master

If the initialization was correct, the Message SENSOR_DATA_OUTPUT from MGC3130 should show the format shown in the following table:

MESSAGE OVERVIEW													
Bytes to be received	Header				Payload								
	MsgSize	Flags	Seq.	ID	DataOutputConfigMask	TimeStamp	SystemInfo	x-Position		y-Position		z-Position	
	byte0	byte0	byte0	byte0	byte0	byte1	byte0	byte0	byte1	byte0	byte1	byte0	byte1
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th
	0x0E	0x00	0x00	0x91	0x10	0x00	0xXX	0x01	0xXX	0xXX	0xXX	0xXX	0xXX