



BaracodaPencil

V2.2

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Changes

V2.2:

Decoder firmware V1.4 requires “get command” at every connection (p.9)

Codabar symbology added (p.21, p.24)

1. Introduction

This document is a description of the protocol uses to configure the BaracodaPencil. In this document you can also find a small description of the hardware. This can be helpful to well understand the choices we've done.

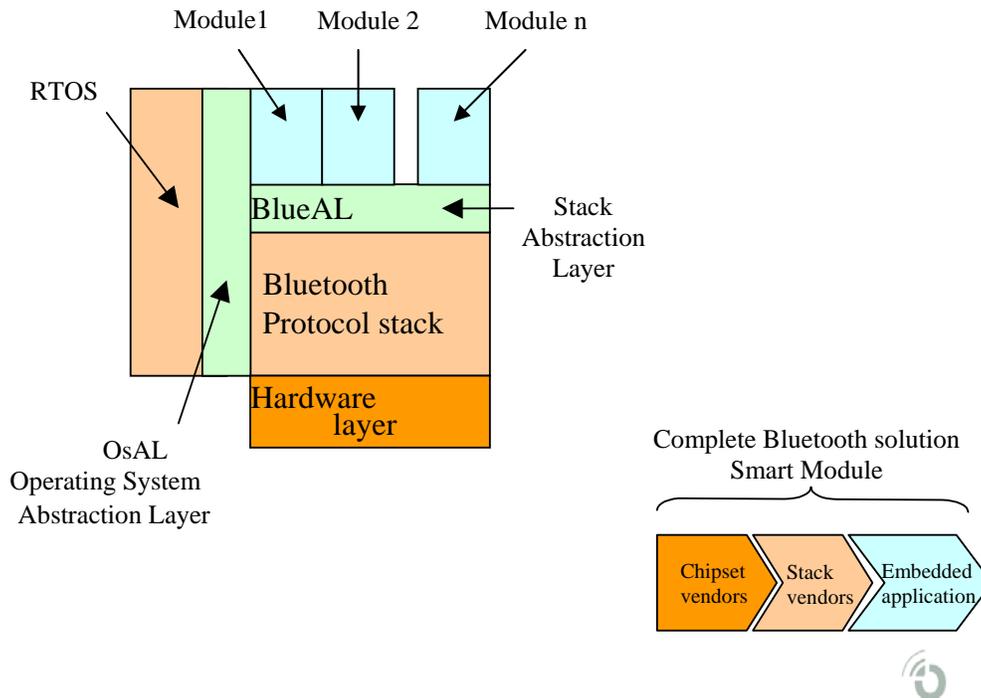
This document is organized as a list of commands and for each of them we added all the necessary commentaries. Please be aware that not all commands are supported by all BaracodaPencil versions. Please use this document together with the CSR_firmware_compatibility table that explains which commands are supported by which BaracodaPencil version.

2. Specification

Baracoda™ will provide a strong know-how in embedded software development onto this platform and a deep knowledge of the Bluetooth protocol.

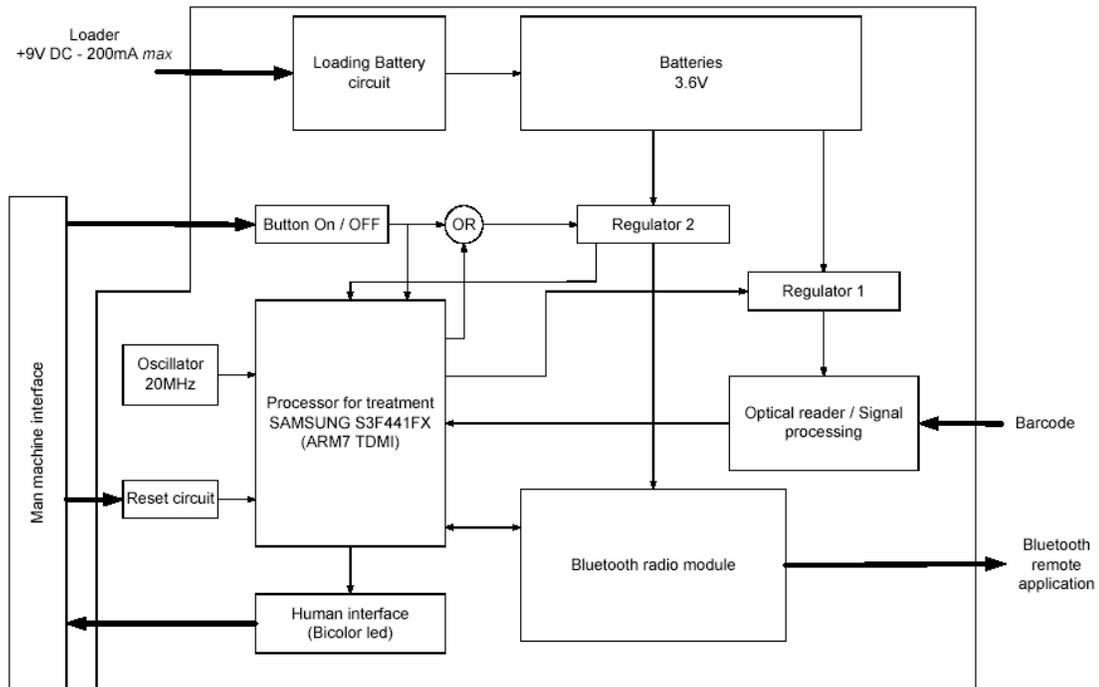
The BaracodaPencil integrate a SmartModule. This SmartModule from Baracoda™ is a Bluetooth module embedding the Bluetooth stack and integrating embedded and dedicated software. It complies with the Bluetooth specification 1.1.

On the BaracodaPencil we have a microprocessor which is doing all the decoding and the storage of barcodes (in batch mode). We can also store in its Flash (non volatile memory) some data like a prefix and a suffix.



3. Hardware integration in the BaracodaPencil

3.1. Functional scheme



3.2. Hardware description

3.2.1. Switching adaptor

Characteristics of the loader:
 Input: 230V / 110V AC/50Hz.
 Output: 9V DC, $I_{max} = 200mA$.

3.2.2. Battery

NiMh: 3 cells of 1.2V. 80mA.hour

3.2.3. Battery charge controller

Reference: MAXIM MAX712CSE
 Package type: SO16

3.2.4. Low DropOut Voltage regulators

Reference: National Semiconductor LP2985AI5-3,0
Package type: SOT23
Input voltage: 3.6 V (from battery)
Output voltage: 3.0V
Dropout voltage: 150mV at 50mA

3.2.5. Optical sensor

Reading speed: 15cm/s to 60cm/s (0.5 ft/s to 2 ft)
Reading Technology: Sapphire Tip - 580nm

3.2.6. Oscillators

20 MHz for S3F441FX microprocessor

3.2.7. Bluetooth module

This platform is based on a 16-bits RISC microprocessor.



Protocol Bluetooth™ 1.1
Outputpower +4dBm maximum (class2)
Antenna gain +0.5dBi (typical)
Frequency 2.4GHz – 2.48GHz (ISM)
Modulation GFSK

3.2.8. Processing power

Processor RISC 16 bits
Flash 8Mbit

RAM 32kBytes

3.2.9. Power consumption

Peak current 80mA
Deep sleep mode 30 μ A
Current @ 1kbit/s 0.8mA (typical)
Current @ 10kbit/s 4mA (typical)
Current @ 100kbit/s 18mA (typical)
Current @ 720kbit/s 67mA (typical)
Voltage operation 2.7V to 3.3V

3.2.10. Environment

Operation temperature -40°C to 80°C
Storage temperature -40°C to 80°C

3.2.11. Regulatory

CE – European Union EMC Directive
FCC
Bluetooth™ qualified

MCU – Samsung S3F441_FX

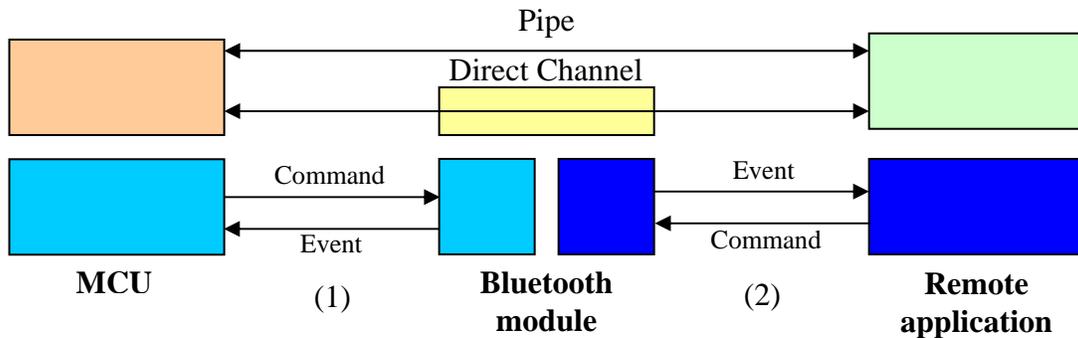
3.2.12. Specification:

32 bits RISC on ARM7TDMI core
Memory system manager: 3 external memory banks.
Built-in 256Kbyte (64K x 32bit) Flash memory
8K-bytes (2K x 32bit) internal SRAM for stack, data memory, and/or code memory
One channel UART
Six 16-bit internal timers with 8-bit pre-scaler and input Capture function
Power down mode: STOP and IDLE modes
One 8-bit basic timer and 3-bit watch-dog timer
Interrupt controller (Total of 19 interrupt sources including 3 external sources)
Sixteen programmable I/O ports

4. Protocol(s) of communication

4.1. Generality

The communication between the BaracodaPencil can be describe as bellow:



: Communication between MCU and Bluetooth module

: Communication between Remote application and Bluetooth module

IMPORTANT: for decoder version 1.4, the application must send a “get” version to the Bluetooth module for versions less than 1.5 (for example “get mode”) at every connection to enable power management.

In some application, it could be interested for the MCU to have some parameters recorded in the Bluetooth module. We purpose 2 slots of 45 bytes (maximum) to do that. In the following, their name will be slot1 and slot2.

Example:

Slots can be used for:

Slot 1 = address of memory where begin the storage of barcodes in batch Mode.

Slot 2 = size of all stored barcodes in the non-volatile memory.

4.2. Communication with MCU

4.2.1. Remote application to the MCU

4.2.1.1. Set_Prefix_Suffix

Command to store prefix and suffix in the memory of the MCU.

Command	"Direct Channel"		Header		Command parameters	Return parameters
	ID	Size	ID	Size		
Set_Prefix_Suffix	0x64	0x00**	0xF0	0x0000**	Prefix_Size, Prefix, Suffix	None

Command Parameter	Value	Description
Prefix_Size	N=0xFF	Size of prefix. Max size is 0xFF.
Prefix	N	Prefix that will be stored in the MCU memory.
Suffix	N	Suffix that will be stored in the MCU memory.

NB: 0xF0 • 128 + 'p'.

4.2.1.2. Get_Prefix_Suffix

Command to store prefix and suffix in the memory of the MCU.

Command	"Direct Channel"		Header		Command parameters	Return parameters
	ID	Size	ID	Size		
Get_Prefix_Suffix	0x64	0x0004	0xF1	0x000000	None	Prefix_Suffix

NB: 0xF1 • 128 + 'q'.

4.2.1.3. Return_Parameters

All the return parameters are sent by the direct channel. The data is encapsulated in the command below:

Prefix_Suffix:

Payload	
ID	Return Parameters
0x71 'q'	Prefix_Size, Suffix_Size, Prefix, Suffix

Parameters	Description
Prefix_Size	Size of the prefix. (1 Byte)
Suffix_Size	Size of the suffix. (1 Byte)
Prefix	Prefix. (N1 Byte(s)(1))
Suffix	Suffix. (N2 Byte(s) (1))

(1)With $N1+N2 \leq 255$.

4.2.1.4. Communication with the Bluetooth Module

4.2.2. General format of packets

Command	Size of Payload		Payload
	MSB	LSB	
1 Byte	2 Bytes		N Bytes

Remote application to the Bluetooth module

4.2.2.1. Set_Pin_Code

This command is used to change the pin code. This pin code is asked by the BaracodaPencil when the remote application wants to create a connection.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Pin_Code	0x01	0x00**	Pin_Code	Status_Event

Command Parameter	Value	Description
Pin_Code	0xN	N = Pin Code. Default pin code is "0000". Size <= 16

4.2.2.2. Get_Pin_Code

This command is used to know what the pin code of the BaracodaPencil is.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Pin_Code	0x07	0x0000	None	Get_Pin_Code_Event

4.2.2.3. Set_Name

This command is used to change name of the BaracodaPencil. The default name is "BaracodaPencil".

Command	Header		Command parameters	Return parameters
	ID	Size		

BaracodaPencil communication protocol V2.2

Set_Name	0x02	0x****	Name	Status_Event
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Command Parameter	Value	Description
Name	0xN	N = Name. Size <= 248 Bytes

4.2.2.4. Get_Name

This command is used to know what the name of the BaracodaPencil is.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Name	0x08	0x0000	None	Get_Name_Event

4.2.2.5. Set_Mode

This command is used to change the operating mode of the BaracodaPencil. These modes can be the real time mode, batch mode, LAN mode or auto switch mode.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Mode	0x03	0x0001	Operating_Mode	Status_Event

Command Parameter	Value	Description
Operating_Mode	0x00 0x01 0x02 0x03	Auto-Switch mode. Batch mode. LAN mode. Real time mode.

4.2.2.6. Get_Mode

This command is used to know in which mode the BaracodaPencil is operating. These modes can be the real time mode, batch mode, LAN mode or auto switch mode.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Mode	0x04	0x0000	None	Get_Mode_event

4.2.2.7. Set_Remote_BDA

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This command is used to change the Bluetooth address of the remote device. This is used when the BaracodaPencil is the master and creates a connection.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Remote_BDA	0x05	0x0006	Remote_BDA	Status_Event

Command Parameter	Value	Description
Remote_BDA	0x*****	Bluetooth address of the remote device

4.2.2.8. Get_Remote_BDA

This command is used to know what the Bluetooth address of the remote device stored is.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Remote_BDA	0x06	0x0000	None	Get_Remote_BDA_event

4.2.2.9. Soft_Reset

This is a specific command used to restore the factory setting of the Bluetooth Module.

Command	Header		Command parameters	Return parameters
	ID	Size		
Soft_Reset	0x52	0x7374	None	None

Send this command it's the equivalent to send the string 'Rst'.

4.2.2.10. Get_Barcode_Number

This command is used to get the number of barcodes stored in memory.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Barcode_Number	0x6E	0x0000	None	Get_Barcode_Number_Event

4.2.2.11. Upload_Barcodes

This command is used to know what the Bluetooth address of the remote device stored is.

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Command	Header		Command parameters	Return parameters
	ID	Size		
Upload_Barcodes	0x67	0x0000	None	Barcode_Packets_Event

4.2.2.12. Get_Version

This command is used to know what the software versions of the Bluetooth Module and the MCU.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Version	0x76	0x0000	None	Get_Bluetooth_Version_Event, Get_MCU_Version_Event

4.2.2.13. Erase

This command is used to erase all the barcodes stored in the memory.

Command	Header		Command parameters	Return parameters
	ID	Size		
Erase	0x7A	0x0000	None	Status_Event

4.2.2.14. Get_Battery_Level

This command is used to know what the battery level of the BaracodaPencil is.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Battery_Level	0x62	0x0000	None	Get_Battery_Level_Event

4.2.2.15. Set_Security_Mode

This command is used to change the level of security of the Bluetooth connection. You have two option connection with security or connection without.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Security_Mode	0x21	0x00**	Security, Pin_Code	Status_Event

Command Parameter	Value	Description
Security	0x00 0x01	Security mode not activated. Security mode activated.

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Pin_Code	0xN	N = Pin Code. Default pin code is "0000". Size <= 16
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4.2.2.16. Get_Security_Mode

This command is used to know what level of security of the Bluetooth connection is used.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Security_Mode	0x20	0x0000	None	Get_Security_Mode_Event

4.2.2.17. Set_Sniff

Sniff mode is a low power mode. In this mode, the connection is activated only during a part of the sniff period.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Sniff	0x09	0x0004	Sniff_Interval, Sniff_Period	Status_Event

Command Parameter	Value	Description
Sniff_Interval	N=0xXXXX	Active time of connection during the sniff period. Min_Sniff_Interval<=Max_Sniff_Interval Length=N*0.625msec. Range for N: 0x0012 – 0xFFFF. If N=0x0000: Sniff mode is not activated. Time Range=7.5ms – 40.9s
Sniff_Period	N=0xXXXX	Sniff period. Length=(2*N-1)*0.625ms. Range for N: 0x0012 – 0xFFFF. If N=0x0000: Sniff mode is not activated. Time Range:7.5ms – 40.9 s.

4.2.2.18. Get_Sniff

This command is used to know what the value of the sniff period is.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Sniff	0x10	0x0000	None	Get_Sniff_Event

4.2.2.19. Set_Link_Timeout

This timeout is used to know if the connection with the remote device is present or not. If there is no response from the remote device during this timeout, the connection is lost.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Link_Timeout	0x19	0x0002	Timeout	Status_Event

Command Parameter	Value	Description
Timeout	N=0xXXXX	Connection timeout. Length=N*0.625msec Range for N: 0x0000 – 0xFFFF. Time Range=0ms – 40.9s

4.2.2.20. Get_Link_Timeout

This timeout is used to know if the connection with the remote device is present or not. If there is no response from the remote device during this timeout, the connection is lost.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Link_Timeout	0x18	0x0000	None	Get_Link_Timeout_Event

4.2.2.21. Set_Inquiry_Scan

This command permit to change the time during which the Bluetooth Module try to find other Bluetooth devices.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Inquiry_Scan	0x26	0x0004	Inquiry_Interval, Inquiry_Period	Status_Event

Command Parameter	Value	Description
Inquiry_Interval	N=0xXXXX	Time interval to search for other Bluetooth devices. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s
Inquiry_Period	N=0xXXXX	A new inquiry scan is done every inquiry period. Length=N*0.625msec

		Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s
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4.2.2.22. Get_Inquiry_Scan

This timeout is used to know if the connection with the remote device is present or not. If there is no response from the remote device during this timeout, the connection is lost.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Inquiry_Scan	0x27	0x0000	None	Get_Inquiry_Scan_Event

4.2.2.23. Set_Page_Scan

This command permit to change the time during which the Bluetooth Module is discoverable.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_Page_Scan	0x24	0x0004	Page_Interval, Page_Period	Status_Event

Command Parameter	Value	Description
Page_Interval	N=0xXXXX	Time interval during which the Bluetooth Module is discoverable. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s
Page_Period	N=0xXXXX	A new page scan is done every page period. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s

4.2.2.24. Get_Page_Scan

This timeout is used to know if the connection with the remote device is present or not. If there is no response from the remote device during this timeout, the connection is lost.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Page_Scan	0x25	0x0000	None	Get_Page_Scan_Event

4.2.2.25. Set_WAP_Config

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This command permits to change the WAP address in the Bluetooth module. This permits to communication with a Bluetooth mobile phone.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_WAP_Config	0x17	0x0065	WAP_Mode, WAP_Address	Status_Event

Command Parameter	Value	Description
WAP_Mode	0x00 0x01	WAP mode off. WAP mode on
WAP_Address	N	WAP address. Size=100Bytes

4.2.2.26. Get_WAP_Config

This command permits to know if the WAP mode is activated and what is the WAP address.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_WAP_Config	0x16	0x0000	None	Get_WAP_Config_Event

4.2.2.27. Set_BP_Config

This command permits to change some configuration parameters of the BaracodaPencil. These parameters are described below.

Command	Header		Command parameters	Return parameters
	ID	Size		
Set_BP_Config	0x63	0x0007	Connected_Timeout, NotConnected_Timeout, Active_Symbology, Encapsulated_Mode	Status_Event

Command Parameter	Value	Description
Connected_Timeout	N=0xXX	At the end of this time the BaracodaPencil will switch off. This timer is on when there is a Bluetooth connection. Range: 0x00 – 0xFF (1min –255min)
NotConnected_Timeout	N=0xXX	At the end of this time the BaracodaPencil will switch off. This timer is on when there is no Bluetooth connection. Range: 0x00 – 0xFF (1min –255min)
Active_Symbology	N=0XXXXXXXX	B0: Code128 B1: Code39 B2: EAN13 B3: EAN8 B4: Interleaved 2/5 B5: Codabar B6: B7:

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Encapsulated_Mode	N=0xXX	B0: Barcodes Bufferized. On(1). B1:* around Code39. On (0). B2:EAN128 in txt format. On(1). B3:EAN128 with Fnc1 opt. On(1) and B2=0 B4: Ack off (0) on (1). B5:Baracoda Encapsulated. On(1). B6:Prefix/suffix. On(1). B7: Enable Codabar flags
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4.2.2.28. Get_BP_Config

This command permits to know what the configuration parameters of the BaracodaPencil are.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_BP_Config	0x73	0x0000	None	Get_BP_Config_Event

4.2.2.29. Get_Supported_Barcodes

This command permits to know all the symbologies that the reader is able to decode.

Command	Header		Command parameters	Return parameters
	ID	Size		
Get_Supported_Barcodes	0x72	0x0000	None	Get_Supported_Barcodes_Event

4.3. Bluetooth module to the remote application

4.3.1. Barcode_Packet_Event

4.3.1.1. No Acknowledge

Event	Header		Event parameters
	ID	Size	
Barcode_Packet_Event	0x32	0xXXXX	Barcode

Parameter	Value	Parameter description
Barcode	(n bytes)	Barcode transmitted

4.3.1.2. Acknowledge

Event	Header		Event parameters
	ID	Size	
Barcode_Packet_Event	0x33	0xXXXX	Barcode

Parameter	Value	Parameter description
Barcode	(n bytes)	Barcode transmitted

4.3.1.3. Get_Barcode_Number_Event

Event	Header		Event parameters
	ID	Size	
Get_Barcode_Number_Event	0x6E	0x0002	Barcode_Number

Parameter	Value	Parameter description
Barcode_Number	0xXX	Number of barcodes in memory.

4.3.1.4. Get_Bluetooth_Version_Event

Event	Header		Event parameters
	ID	Size	
Get_Bluetooth_Version_Event	0x76	0x00XX	Bluetooth_Version

Parameter	Value	Parameter description
Bluetooth_Version	N	Bluetooth firmware version.

4.3.1.5. Get_MCU_Version_Event

Event	Header		Event parameters
	ID	Size	
Get_MCU_Version_Event	0x76	0x01XX	MCU_Version

Parameter	Value	Parameter description
MCU_Version	N	MCU firmware version. List :(1) BPU_1.0 BPU_1.1 BPU_1.2 BPU_1.3 BPU_1.4 BPV_1.0 BPV_1.1 BPV_1.2 BPV_1.3 BPV_1.4

(1)BPU : BaracodaPencilUpgrade_VersionNumber. (Bluetooth upgraded versions).

BPV : BaracodaPencilVersion_VersionNumber. (Production versions).

4.3.1.6. Get_Battery_Level_Event

Event	Header		Event parameters
	ID	Size	
Get_Battery_Level_Event	0x62	0x0002	Battery_Level

Parameter	Value	Parameter description
Battery_Level	0x0XXX	Voltage level of the battery in mv. Range: 0x0000 – 0x0708

4.3.1.7. Get_BP_Config_Event

Event	Header		Event parameters
	ID	Size	
Get_BP_Config_Event	0x73	0x0007	Connected_Timeout, NotConnected_Timeout, Active_Symbology, Encapsulated_Mode

Parameter	Value	Parameter description
Connected_Timeout	N=0xXX	At the end of this time the BaracodaPencil will switch off. This timer is on when there is a Bluetooth connection. Range: 0x00 – 0xFF (0s – 4.25min)
NotConnected_Timeout	N=0xXX	At the end of this time the BaracodaPencil will switch off. This timer is on when there is no Bluetooth connection.

		Range: 0x00 – 0xFF (0s – 4.25min)
Active_Symbology	N=0XXXXXXXX	B0: Code128 B1: Code39 B2: EAN13 B3: EAN8 B4: Interleaved 2/5 B5: Codabar B6: B7:
Encapsulated_Mode	N=0xXX	B0: Barcodes Bufferized. On(1). B1:* around Code39. On (0). B2:EAN128 in txt format. On(1). B3:EAN128 with Fnc1 opt. On(1) and B2=0 B4: Ack off (0) on (1). B5:Baracoda Encapsulated. On(0). B6:Prefix/suffix. On(1). B7:Enable Codabar flags

4.3.1.8. Get_Supported_Barcodes_Event

Event	Header		Event parameters
	ID	Size	
Get_Supported_Barcodes_Event	0x72	0x0004	Supported_Barcodes

Parameter	Value	Parameter description
Supported_Barcodes	0XXXXXXXX	B0: Code128 B1: Code39 B2: EAN13 B3: EAN8 B4: Interleaved 2/5 B5: Codabar B6: B7:

4.3.1.9. Status_Event

Event	Header		Event parameters
	ID	Size	
Status_Event	0x**(1)	0x0001	Status

Parameter	Value	Parameter description
Status	0x00	Command fail
	0x01	Command pass

(1)Copy the first Byte of the command's header.

4.3.1.10. Get_Pin_Code_Event

Event	Header		Event parameters
	ID	Size	
Get_Pin_Code_Event	0x07	0x00**	Pin_Code

Parameter	Value	Parameter description
Pin_Code	0xN	N: Pin code used for the Bluetooth connection. Size N < 16 bytes.

4.3.1.11. Get_Name_Event

Event	Header		Event parameters
	ID	Size	
Get_Name_Event	0x08	0x****	Name

Parameter	Value	Parameter description
Name	N	Usual name of the BaracodaPencil. Max size = 248 Bytes.

4.3.1.12. Get_Mode_Event

Event	Header		Event parameters
	ID	Size	
Get_Mode_Event	0x04	0x0001	Mode

Parameter	Value	Parameter description
Mode	0x00 0x01 0x02 0x03	Auto-Switch mode. Batch mode. LAN mode. Real time mode.

4.3.1.13. Get_Remote_BDA_Event

Event	Header		Event parameters
	ID	Size	
Get_Remote_BDA_Event	0x06	0x0006	Remote_BDA

Parameter	Value	Parameter description
Remote_BDA	0x*****	Bluetooth Address of the remote device.

4.3.1.14. Get_Security_Mode_Event

Event	Header		Event parameters
	ID	Size	
Get_Security_Mode_Event	0x20	0x0001	Security

Parameter	Value	Parameter description
Security	0x00	Security off.
	0x01	Security on.

4.3.1.15. Get_Sniff_Event

Event	Header		Event parameters
	ID	Size	
Get_Sniff_Event	0x10	0x0004	Sniff_Interval, Sniff_Period

Parameter	Value	Parameter description
Sniff_Interval	N=0xXXXX	Active time of connection during the sniff period. Min_Sniff_Interval<=Max_Sniff_Interval Length=N*0.625msec. Range for N: 0x0012 – 0xFFFF. If N=0x0000: Sniff mode is not activated. Time Range=7.5ms – 40.9s
Sniff_Period	N=0xXXXX	Sniff period. Length=(2*N-1)*0.625ms. Range for N:0x0012 – 0xFFFF. If N=0x0000: Sniff mode is not activated. Time Range:7.5ms – 40.9 s.

4.3.1.16. Get_Link_Timeout_Event

Event	Header		Event parameters
	ID	Size	
Get_Link_Timeout_Event	0x18	0x0002	Timeout

Parameter	Value	Parameter description
Timeout	N=0xXXXX	Connection timeout. Length=N*0.625ms. Range for N: 0x0000 – 0xFFFF. Time Range: 0ms – 40.9s.

4.3.1.17. Get_Inquiry_Scan_Event

Event	Header		Event parameters
	ID	Size	
Get_Inquiry_Scan_Event	0x27	0x0004	Inquiry_Interval, Inquiry_Period

Parameter	Value	Parameter description
Inquiry_Interval	N=0xXXXX	Time interval to search for other Bluetooth devices. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s
Inquiry_Period	N=0xXXXX	A new inquiry scan is done every inquiry period. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s

4.3.1.18. Get_Page_Scan_Event

Event	Header		Event parameters
	ID	Size	
Get_Page_Scan_Event	0x27	0x0004	Page_Interval, Page_Period

Parameter	Value	Parameter description
Page_Interval	N=0xXXXX	Time interval during which the Bluetooth Module is discoverable. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s
Page_Period	N=0xXXXX	A new page scan is done every page period. Length=N*0.625msec Range for N: 0x0012 – 0x1000. Time Range=0ms – 40.9s

4.3.1.19. Get_WAP_Config_Event

Event	Header		Event parameters
	ID	Size	
Get_WAP_Config_Event	0x16	0x0065	WAP_Mode, WAP_Address

Parameter	Value	Parameter description
WAP_Mode	0x00 0x01	WAP mode off. WAP mode on
WAP_Address	N	WAP address. Size=100 Bytes