

0602

Beacon 15 は OFF で, 0 ~14 の値を設定可能.

(これからの流れ)

- ① Beacon mode を OFF
- ② Data 送受信
- ③ Dissector のセットアップ
- ④ UART の構築
- ⑤ 実際に Sensor を使用

(今週の進捗)

今まで使用していたものは beacon が見当たらなかったため, JN5189 を使用する.

(MONOSTICK 機器も開発環境も変更になる)

>しかし、アルベルト先生と相談した結果、JN5189 は使用しない.

引き続き、同じ環境と通信機器を使用する.

Poll=beacon と予想をして、Enddevice にある poll コードの実行を 1 回にした.

コマンドプロンプトで Router で sniffer が使用できるように設定する.

```
C:\Users¥b2¥Desktop>JN51xx-802.15.4-Sniffer-Server.exe -s COM4 -c 11
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JN51xx 802.15.4 Sniffer Server
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version 3 or later for more details. You should have received a copy
of the GNU General Public License along with JN51xx 802.15.4 Sniffer
Server. If not, see <http://www.gnu.org/licenses/>.
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Starting on port COM4 at 1000000 baud
Sniffing on channel 11
Sending to 127.0.0.1:49999
```

Poll を初めの 1 回だけにして、Coordinator から Enddevice にデータを送信し、Coordinator ⇔ Router ⇔ Enddevice でデータ送受信。

以下が Wireshark での表示内容である。

2 3.266256	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74 Standard query 0xebc2 A wpad
3 3.266461	192.168.1.42	224.0.0.252	LLMNR	54 Standard query 0xebc2 A wpad
4 3.369592	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74 Standard query 0xebc2 A wpad
5 3.369759	192.168.1.42	224.0.0.252	LLMNR	54 Standard query 0xebc2 A wpad
6 3.572184	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
7 4.336098	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
8 5.006861	192.168.1.42	239.255.255.250	SSDP	307 NOTIFY * HTTP/1.1
9 5.100410	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
10 9.998143	192.168.1.42	239.255.255.250	SSDP	307 NOTIFY * HTTP/1.1
11 15.004954	192.168.1.42	239.255.255.250	SSDP	307 NOTIFY * HTTP/1.1
12 18.470776	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74 Standard query 0x6d04 A wpad
13 18.470969	192.168.1.42	224.0.0.252	LLMNR	54 Standard query 0x6d04 A wpad
14 18.576846	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74 Standard query 0x6d04 A wpad
15 18.576977	192.168.1.42	224.0.0.252	LLMNR	54 Standard query 0x6d04 A wpad
16 18.781982	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
17 19.543849	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
18 19.996210	192.168.1.42	239.255.255.250	SSDP	307 NOTIFY * HTTP/1.1
19 20.308129	192.168.1.42	192.168.1.255	NBNS	82 Name query NB WPAD<00>
20 25.003152	192.168.1.42	239.255.255.250	SSDP	307 NOTIFY * HTTP/1.1

Frame 1: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits) on interface \Device\NPF_{Loopback}, id 0
Internet Protocol Version 4, Src: 192.168.1.42, Dst: 239.255.255.250
User Datagram Protocol, Src Port: 60617, Dst Port: 1900
Multicast Service Discovery Protocol

Time	Source	Destination	Protocol	Length	Info
72 138.502645	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x5a0e A wpad
73 138.511684	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0xb4d2 A wpad
74 138.511832	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0xb4d2 A wpad
75 138.512444	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0x0907 A wpad
76 138.512568	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x0907 A wpad
77 138.598131	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0x5a0e A wpad
78 138.598250	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x5a0e A wpad
79 138.613709	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0xb4d2 A wpad
80 138.613717	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0x0907 A wpad
81 138.613771	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0xb4d2 A wpad
82 138.613784	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x0907 A wpad
83 138.801551	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
84 138.816770	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
85 138.817056	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
86 139.565096	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
87 139.580692	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
88 139.580779	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
89 139.986266	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
90 140.329410	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>

Frame 1: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits) on interface \Device\NPF_{Loopback}, id 0 /Loopback

Time	Source	Destination	Protocol	Length	Info
587 153.208314	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	445 → 58126 [ACK] Seq=7343 Ack=6801 Win=7380 Len=0
588 153.208440	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	308	Create Response File: Public\Pictures\desktop.ini
589 153.208471	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58126 → 445 [ACK] Seq=6801 Ack=7587 Win=8192 Len=0
590 153.208525	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	188	Ioctl Request FSCTL_SRV_REQUEST_RESUME_KEY File: Public\Pictures\desktop.ini
591 153.208537	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	445 → 58126 [ACK] Seq=7587 Ack=6925 Win=7256 Len=0
592 153.208555	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	212	Ioctl Response FSCTL_SRV_REQUEST_RESUME_KEY File: Public\Pictures\desktop.ini
593 153.208568	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58126 → 445 [ACK] Seq=6925 Ack=7735 Win=8044 Len=0
594 153.208678	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	172	GetInfo Request FILE_INFO/SMB2_FILE_STANDARD_INFO File: Public\Pictures\desktop.ini
595 153.208690	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	445 → 58126 [ACK] Seq=7735 Ack=7033 Win=7148 Len=0
596 153.208736	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	164	GetInfo Response
597 153.208749	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58126 → 445 [ACK] Seq=7033 Ack=7835 Win=7944 Len=0
598 153.208795	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	172	GetInfo Request FILE_INFO/SMB2_FILE_STANDARD_INFO File: Public\Pictures\desktop.ini
599 153.208806	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	445 → 58126 [ACK] Seq=7835 Ack=7141 Win=7040 Len=0
600 153.208881	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	164	GetInfo Response
601 153.208895	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58126 → 445 [ACK] Seq=7141 Ack=7935 Win=7844 Len=0
602 153.208973	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	172	GetInfo Request FILE_INFO/SMB2_FILE_BASIC_INFO File: Public\Pictures\desktop.ini
603 153.208986	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	445 → 58126 [ACK] Seq=7935 Ack=7249 Win=6932 Len=0
604 153.209027	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	180	GetInfo Response
605 153.209040	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58126 → 445 [ACK] Seq=7249 Ack=8051 Win=7728 Len=0

	Time	Source	Destination	Protocol	Length	Info
953	216.328668	192.168.1.42	239.255.255.250	SSDP	530	NOTIFY * HTTP/1.1
954	216.328889	::1	ff02::c	SSDP	537	NOTIFY * HTTP/1.1
955	216.328984	fe80::9d10:e358:9f6...	ff02::c	SSDP	559	NOTIFY * HTTP/1.1
956	216.329228	127.0.0.1	239.255.255.250	SSDP	463	NOTIFY * HTTP/1.1
957	216.329339	192.168.1.42	239.255.255.250	SSDP	466	NOTIFY * HTTP/1.1
958	216.329552	::1	ff02::c	SSDP	473	NOTIFY * HTTP/1.1
959	216.329641	fe80::9d10:e358:9f6...	ff02::c	SSDP	495	NOTIFY * HTTP/1.1
960	216.329857	127.0.0.1	239.255.255.250	SSDP	472	NOTIFY * HTTP/1.1
961	216.329958	192.168.1.42	239.255.255.250	SSDP	475	NOTIFY * HTTP/1.1
962	216.330175	::1	ff02::c	SSDP	482	NOTIFY * HTTP/1.1
963	216.330271	fe80::9d10:e358:9f6...	ff02::c	SSDP	504	NOTIFY * HTTP/1.1
964	216.330482	127.0.0.1	239.255.255.250	SSDP	543	NOTIFY * HTTP/1.1
965	216.330584	192.168.1.42	239.255.255.250	SSDP	546	NOTIFY * HTTP/1.1
966	216.330786	::1	ff02::c	SSDP	553	NOTIFY * HTTP/1.1
967	216.330880	fe80::9d10:e358:9f6...	ff02::c	SSDP	575	NOTIFY * HTTP/1.1
968	216.331123	127.0.0.1	239.255.255.250	SSDP	515	NOTIFY * HTTP/1.1
969	216.331230	192.168.1.42	239.255.255.250	SSDP	518	NOTIFY * HTTP/1.1
970	216.331437	::1	ff02::c	SSDP	525	NOTIFY * HTTP/1.1
971	216.331529	fe80::9d10:e358:9f6...	ff02::c	SSDP	547	NOTIFY * HTTP/1.1

Frame 1: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits) on interface \Device\NPF_{Loopback}, id 0
Null/Loopback
Internet Protocol Version 4, Src: 192.168.1.42, Dst: 239.255.255.250
User Datagram Protocol, Src Port: 60617, Dst Port: 1900
Simple Service Discovery Protocol

	Time	Source	Destination	Protocol	Length	Info
1605	259.966304	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
1606	260.355985	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
1607	264.973229	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
1608	269.964508	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
1609	270.588211	0.0.0.0	255.255.255.255	DHCP	332	DHCP Discover - Transaction ID 0x224a867
1610	273.606039	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0x2e33 A wpad
1611	273.606810	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x2e33 A wpad
1612	273.707950	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0x2e33 A wpad
1613	273.708161	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0x2e33 A wpad
1614	273.911191	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
1615	274.040772	192.168.1.42	192.168.1.255	BROWSER	233	Local Master Announcement B2-PC, Workstation, Server, NT Workstation, Potential Browser, Master Browser
1616	274.674898	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
1617	274.971395	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
1618	275.439222	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
1619	277.896408	192.168.1.42	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
1620	277.896638	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
1621	279.962494	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
1622	280.898415	192.168.1.42	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1
1623	280.898711	127.0.0.1	239.255.255.250	SSDP	165	M-SEARCH * HTTP/1.1

Frame 1: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits) on interface \Device\NPF_{Loopback}, id 0

2172	385.731070	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58141 → 445 [ACK] Seq=7485 Ack=8323 Win=7424 Len=0
2173	385.731697	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	SMB2	136	Session Logoff Response
2174	385.731717	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58141 → 445 [ACK] Seq=7485 Ack=8323 Win=7424 Len=0
2175	385.732191	fe80::9d10:e358:9f6...	fe80::9d10:e358:9f6...	TCP	64	58141 → 445 [RST, ACK] Seq=7485 Ack=8323 Win=0 Len=0
2176	389.941357	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
2177	393.663027	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0xf2ba A wpad
2178	393.663416	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0xf2ba A wpad
2179	393.763253	fe80::9d10:e358:9f6...	ff02::1:3	LLMNR	74	Standard query 0xf2ba A wpad
2180	393.763494	192.168.1.42	224.0.0.252	LLMNR	54	Standard query 0xf2ba A wpad
2181	393.966280	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
2182	394.730159	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
2183	394.948722	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1
2184	395.494487	192.168.1.42	192.168.1.255	NBNS	82	Name query NB WPAD<00>
2185	399.940003	192.168.1.42	239.255.255.250	SSDP	307	NOTIFY * HTTP/1.1

Frame 1: 307 bytes on wire (2456 bits), 307 bytes captured (2456 bits) on interface \Device\NPF_{Loopback}, id 0
Null/Loopback

Wireshark の表示内容を理解していないため、確認する。

(今後のスケジュール)

	スケジュール	実施したこと	できなかったこと	来週への課題
5/26 ~ 6/2	・ JN5169にbeaconがないため JN5189を使用	・ JN5189を検討結果使用しない ・ pollコードを制御	wiresharkの全般の理解	・ JN5169を継続 ・ beaconの修正 ・ dissectorを構築
6/2 ~ 9	・ beaconをOFFにする ・ DissectorのSetup			
6/9 ~ 23	・ UARTのSetup			
6/23 ~ 7/7	・ 実際にセンサを使用			