Initial attempt at a Davinci Pro protocol analysis

Query Protocols

XYZv3/query=a

b:27<LF>d:0,0,0<LF>e:0<LF>f:1,234831<LF>i:9Q7KEPAZ5DE12KA401<LF>j:9511<LF>L:1,63
750,20802<LF>m:0,0,0<LF>o:p8,t1,c1,a-<LF>O:{"nozzle":"210","bed":"40"}<LF>p:dvF1
W0A000<LF>s:{"fm":1,"fd":1,"dr":{"top":"off","front":"off"},"sd":"yes","eh":"0",
"of":"1"}<LF>t:1,22<LF>v:1.3.1<LF>w:1,GBA66TH59E0069<LF>n:Davinci 3D   <LF>X:
2,GB-0004-0000-TH-000-0000-00000<LF>l:en<LF>V:5.1.5<LF>4:{"wlan":{"ip":"0.0.0.0"
,"ssid":"","channel":"0","MAC":"20:20:20:20:20:20"}}<LF>$<LF>

XYZv3/config=lang:[en]
ok<LF>$<LF>

XYZv3/config=ssid:[SSID,Password With Spaces If Needed,4]   *(4 = channel number)*

XYZv3/config=disconnectap
ok<LF>$<LF>

XYZv3/query=4
ok<LF>$<LF>
4:{"wlan":{"ip":"0.0.0.0","ssid":"SSID2","channel":"4","MAC":"20:20:20:20:20:20"}}<LF>$<LF>

XYZv3/config=name:[Davinci 3D]

XYZv3/query=W
W:[{"ssid":"SSID0","bssid":"00:00:00:00:00:00","channel":"4","rssiValue":"-81","security":"1"},
{"ssid":"SSID1","bssid":"10:10:10:10:10:10","channel":"4","rssiValue":"-76","security":"8"},
{"ssid":"SSID2","bssid":"20:20:20:20:20:20","channel":"8","rssiValue":"-59","security":"8"}]<LF>$<LF>

Upload Protocol:

Input
Response

```
00000000   58 59 5a 76 33 2f 75 70   6c 6f 61 64 3d 4d 79 54    XYZv3/up load=MyT
00000010   65 73 74 2e 67 63 6f 64   65 2c 32 35 30 34 30 0d    est.gcod e,25040.
00000020   0a                                                    .
```

00000000   6f 6b 0a   ok.

```
00000021   00 00 00 00 00 00 20 00   33 44 50 46 4e 4b 47 31    ...... . 3DPFNKG1
00000031   33 57 54 57 01 05 00 00   00 00 12 4c 00 00 00 00    3WTW.... ...L....
00000041   00 00 00 00 00 00 00 00   00 00 00 00 00 00 00 00    ........ ........
00000051   00 00 00 00 00 00 00 00   00 00 00 00 00 00 00 00    ........ ........

00002015   00 00 00 00 00 00 00 00   00 00 00 00 00 00 00 00    ........ ........
00002025   00 00 00 00 00 00 00 00                              ........
```

00000003   6f 6b 0a   ok.

```
0000202D   00 00 00 01 00 00 20 00   64 7d b5 0f 1e 37 da d9    ...... . d}...7..
0000203D   2a 8f 68 8b 79 9a cb 91   28 11 99 9a f8 6a 9a de    *.h.y... (....j..

0000601D   e2 d2 78 b4 da 8b 94 fa   03 03 ee 0d 58 64 7e 32    ..x..... ....Xd~2
0000602D   fd 50 f2 60 fe d9 65 92   95 c6 7f 0b dd ac ab 65    .P.`..e. .......e
0000603D   1e 0f e6 b7 00 00 00 00                              .......
```

00000009   6f 6b 0a   ok.

```
00006045   00 00 00 03 00 00 01 d0   81 86 19 4e d6 e8 b4 61    ........ ...N...a
00006055   90 c7 dd 88 8a da 35 89   67 71 bd 87 e2 59 10 bf    ......5. gq...Y..

00006205   8a ef c4 f9 2e 76 d0 46   73 37 68 cb 43 a2 16 ec    .....v.F s7h.C...
00006215   76 3e 7f fa 51 1f 48 c5   00 00 00 00                v>..Q.H. ....
```

0000000C   6f 6b 0a   ok.

```
00006221   58 59 5a 76 33 2f 75 70   6c 6f 61 64 44 69 64 46    XYZv3/up loadDidF
00006231   69 6e 69 73 68                                       inish
```

0000000F   6f 6b 0a   ok.
00000012   6f 6b 0a   ok.
00000015   6f 6b 0a   ok.

Decoding the Status Response

b: Baseplate Temperature
b:26

d: Progress (% Complete, Time elapsed -mins, Estimated time - mins)
d:0,0,0

e:0

f:1,234831

i: Serial Number
i:9Q7KEPAZ5DE12KA401

j: Status
j:9511
9511 – Idle
9700 – Button Pressed when Idle
9500 – Initialising (also returns E22$ when busy uploading / initialising)
9501 – Heating
9601 – Paused when heating or printing
9505 – Printing
9506 – Cooling
9508 – Complete / Cancel – Bed Retracting
9509 – Complete – Press OK Button

L: Life (?, ?, Lifetime in minutes)
L:1,64260,20802   *(probably on time and print time)*

m:0,0,0

o:p8,t1,c1,a-

O:{"nozzle":"210","bed":"40"}

p:dvF1W0A000

s: Status (dr=door)
s:{"fm":1,"fd":1,"dr":{"top":"off","front":"off"},"sd":"yes","eh":"0","of":"1"}

t: nozzle temperatures
t:1,22

v: software version
v:1.3.1

w: serial number of cartridge
w:1,GBA66TH59E0069

n: name of printer
n:Davinci 3D

X:2,GB-0004-0000-TH-000-0000-00000

l: Language
l:en

V: Wifi Version
V:5.1.5

4: IPV4 Wifi Details
4:{"wlan":{"ip":"192.168.1.7","ssid":"My-SSID","channel":"8","MAC":"20:20:20:20:20:20"}}