

```
1 -----
2 --
3 --          GNAT RAVENSCAR for NXT          --
4 --          Copyright (C) 2010-2011, AdaCore --
5 --
6 -----
7
8 -- Low-level driver for BlueCore4 bluetooth device.
9
10 with System;
11 with Interfaces; use Interfaces;
12
13 package NXT.BC4 is
14
15     procedure Initialize_Device;
16
17     type Reset_Status is (Success, Failed, Unpowered);
18     pragma Discard_Names (Reset_Status);
19
20     procedure Reset_Device (Result : out Reset_Status);
21
22     procedure Enter_Command_Mode;
23
24     procedure Enter_Data_Mode;
25
26     function Current_Mode return Unsigned_32;
27
28     procedure Send (Msg : System.Address; Length : Natural);
29
30     procedure Receive (Msg : System.Address);
31
32 private
33
34     subtype Buffer_Index is Integer range 0 .. 127;
35
36     type Buffer is array (Buffer_Index) of Unsigned_8;
37
38     pragma Volatile (Buffer);
39
40     subtype Buffer_Selector is Unsigned_8 range 0 .. 1;
```

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41
42   type Double_Buffer is array (Buffer_Selector) of aliased Buffer;
43
44   Incoming      : Double_Buffer;
45   Index         : Integer;
46   Current_Buffer : Buffer_Selector;
47
48   type Buffer_Reference is access all Buffer;
49   for Buffer_Reference'Storage_Size use 0;
50   pragma No_Strict_Aliasing (Buffer_Reference);
51
52   Buf_Ptr : Buffer_Reference;
53
54 end NXT.BC4;
55
```