

# Third Party Software Used In WUSB6100M Version Setup\_v1.0.0.8\_Driver\_v11.1.0.X

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April 6, 2018

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## Contents

### 1- WLAN Host Driver      version v11.1.0.X

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 *
 * $FreeBSD: src/sys/net80211/ieee80211_ioctl.h,v 1.8 2004/12/31 22:42:38 sam Exp $
 */
```

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 */
/* crypto/aes/aes_core.c -*- mode:C; c-file-style: "eay" -*- */
/**
 * rijndael-alg-fst.c
```

```
*
* @version 3.0 (December 2000)
*
* Optimised ANSI C code for the Rijndael cipher (now AES)
*
* @author Vincent Rijmen
* @author Antoon Bosselaers
* @author Paulo Barreto
*
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/* Note: rewritten a little bit to provide error control and an OpenSSL-
compatible API */
```

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```
*/
/* MD4.H - header file for MD4C.C
* $FreeBSD: src/lib/libmd/md4.h,v 1.9 1999/08/28 00:05:05 peter Exp $
*/
```

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/* $FreeBSD: src/sys/net80211/ieee80211_radiotap.h,v 1.5 2005/01/22 20:12:05 sam Exp $ */
/* $NetBSD: ieee80211_radiotap.h,v 1.10 2005/01/04 00:34:58 dyoung Exp $ */
```

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\* @(#)if\_llc.h 8.1 (Berkeley) 6/10/93  
\* \$FreeBSD: src/sys/net/if\_llc.h,v 1.9 2002/09/23 06:25:08 alfred Exp \$  
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/\*\*  
\* rijndael-alg-fst.c  
\*  
\* @version 3.0 (December 2000)  
\*  
\* Optimised ANSI C code for the Rijndael cipher (now AES)  
\*  
\* @author Vincent Rijmen  
\* @author Antoon Bosselaers  
\* @author Paulo Barreto  
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 *
 * $FreeBSD: src/sys/dev/ath/if_athioctl.h,v 1.5 2003/12/28 07:00:32 sam Exp $
 */

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\* code or tables extracted from it, as desired without restriction.

\*  
\* First, the polynomial itself and its table of feedback terms. The  
\* polynomial is

\*  $X^{32}+X^{26}+X^{23}+X^{22}+X^{16}+X^{12}+X^{11}+X^{10}+X^8+X^7+X^5+X^4+X^2+X^1+X^0$

\*  
\*

\* Note that we take it "backwards" and put the highest-order term in  
\* the lowest-order bit. The  $X^{32}$  term is "implied"; the LSB is the  
\*  $X^{31}$  term, etc. The  $X^0$  term (usually shown as "+1") results in  
\* the MSB being 1

\*  
\*

\* Note that the usual hardware shift register implementation, which  
\* is what we're using (we're merely optimizing it by doing eight-bit  
\* chunks at a time) shifts bits into the lowest-order term. In our  
\* implementation, that means shifting towards the right. Why do we  
\* do it this way? Because the calculated CRC must be transmitted in  
\* order from highest-order term to lowest-order term. UARTs transmit

\* characters in order from LSB to MSB. By storing the CRC this way  
\* we hand it to the UART in the order low-byte to high-byte; the UART  
\* sends each low-bit to high-bit; and the result is transmission bit  
\* by bit from highest- to lowest-order term without requiring any bit  
\* shuffling on our part. Reception works similarly  
\*  
\* The feedback terms table consists of 256, 32-bit entries. Notes  
\*  
\* The table can be generated at runtime if desired; code to do so  
\* is shown later. It might not be obvious, but the feedback  
\* terms simply represent the results of eight shift/xor opera  
\* tions for all combinations of data and CRC register values  
\*  
\* The values must be right-shifted by eight bits by the "updcrc  
\* logic; the shift must be unsigned (bring in zeroes). On some  
\* hardware you could probably optimize the shift in assembler by  
\* using byte-swap instructions  
\* polynomial \$edb88320  
\*  
\*  
\* CRC32 code derived from work by Gary S. Brown.  
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 *
 * Modifications to public domain implementation:
 * - support only 128-bit keys
 * - cleanup
 * - use C pre-processor to make it easier to change S table access
 * - added option (AES_SMALL_TABLES) for reducing code size by about 8 kB at
 * cost of reduced throughput (quite small difference on Pentium 4,
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/\* This is based on SHA256 implementation in LibTomCrypt that was released into  
\* public domain by Tom St Denis. \*/

---

---

```
/*
 * rijndael-alg-fst.c
 *
 * @version 3.0 (December 2000)
 *
 * Optimised ANSI C code for the Rijndael cipher (now AES)
 *
 * @author Vincent Rijmen
 * @author Antoon Bosselaers
 * @author Paulo Barreto
 *
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 */
```

---

---

```
// This code implements the MD5 message-digest algorithm.
// The algorithm is due to Ron Rivest. This code was
// written by Colin Plumb in 1993, no copyright is claimed.
// This code is in the public domain; do with it what you wish.
//
// Equivalent code is available from RSA Data Security, Inc.
// This code has been tested against that, and is equivalent,
// except that you don't need to include two pages of legalese
// with every copy.
//
// To compute the message digest of a chunk of bytes, declare an
// MD5Context structure, pass it to MD5Init, call MD5Update as
// needed on buffers full of bytes, and then call MD5Final, which
// will fill a supplied 16-byte array with the digest.
//
```

---

---

```
/*
SHA-1 in C
By Steve Reid
100% Public Domain
```

```
-----
Modified 7/98
By James H. Brown
Still 100% Public Domain
```

```
Corrected a problem which generated improper hash values on 16 bit machines
Routine SHA1Update changed from
void SHA1Update(SHA1_CTX* context, unsigned char* data, unsigned int
```

```
len)
to
void SHA1Update(SHA1_CTX* context, unsigned char* data, unsigned
long len)
```

The 'len' parameter was declared an int which works fine on 32 bit machines. However, on 16 bit machines an int is too small for the shifts being done against it. This caused the hash function to generate incorrect values if len was greater than 8191 (8K - 1) due to the 'len << 3' on line 3 of SHA1Update().

Since the file IO in main() reads 16K at a time, any file 8K or larger would be guaranteed to generate the wrong hash (e.g. Test Vector #3, a million "a"s).

I also changed the declaration of variables i & j in SHA1Update to unsigned long from unsigned int for the same reason.

These changes should make no difference to any 32 bit implementations since an int and a long are the same size in those environments.

--

I also corrected a few compiler warnings generated by Borland C.

1. Added #include for exit() prototype
2. Removed unused variable 'j' in SHA1Final
3. Changed exit(0) to return(0) at end of main.

ALL changes I made can be located by searching for comments containing 'JHB'

-----  
Modified 8/98  
By Steve Reid  
Still 100% public domain

- 1- Removed #include and used return() instead of exit()
- 2- Fixed overwriting of finalcount in SHA1Final() (discovered by Chris Hall)
- 3- Changed email address from steve@edmweb.com to sreid@sea-to-sky.net

-----  
Modified 4/01  
By Saul Kravitz  
Still 100% PD  
Modified to run on Compaq Alpha hardware.

-----  
Modified 4/01  
By Jouni Malinen  
Minor changes to match the coding style used in Dynamics.

Modified September 24, 2004  
By Jouni Malinen  
Fixed alignment issue in SHA1Transform when SHA1HANDSOFF is defined.

\*/

---

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```

```
*/

//
// Name: lzuncompr.c
// Author: Vitaly Luban
// Based on code from Marcus Geelnard
// Description: LZ77 decoder implementation.
// Reentrant: Yes
//
// -----
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//
// Marcus Geelnard
// marcus.geelnard at https://protect-us.mimecast.com/s/wX1rBQF8QKHd
//
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//
// Marcus Geelnard
// marcus.geelnard at https://protect-us.mimecast.com/s/wX1rBQF8QKHd
```

//

//

// Name: lz.h

// Author: Marcus Geelnard

// Description: LZ77 coder/decoder interface.

// Reentrant: Yes

//

// \$ATH\_LICENSE\_NULL\$

// Copyright (c) 2003-2006 Marcus Geelnard

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