

ME Analyzer ([Click Here To Download](#))

Intel Engine Firmware Analysis Tool

ME Analyzer v1.96.0 r175

12.0.45.1509_CON_H_BA_PRD_EXTR.bin (1/1)

Family	CSE ME
Version	12.0.45.1509
Release	Production
Type	Region, Extracted
SKU	Consumer H
Chipset	CNP-H B,A
TCB Security Version Number	1
ARB Security Version Number	6
Version Control Number	19
Production Ready	Yes
OEM RSA Signature	No
OEM Unlock Token	No
FWUpdate Support	Yes
Date	2019-08-05
File System State	Configured
Size	0x274000
Flash Image Tool	12.0.45.1509
Latest	Yes

Power Management Controller

Family	PMC
Version	300.2.11.1020
Release	Production
Type	Independent
Chipset SKU	H
Chipset Stepping	B
TCB Security Version Number	3
ARB Security Version Number	3
Version Control Number	0

A. About ME Analyzer

ME Analyzer is a tool which parses Intel Engine & PMC firmware images from the (Converged Security) Management Engine, (Converged Security) Trusted Execution Engine, (Converged Security) Server Platform Services & Power Management Controller families. It can be used by end-users who are looking for all relevant firmware information such as Family, Version, Release, Type, Date, SKU, Platform etc. It is capable of detecting new/unknown firmware, checking firmware health, Updated/Outdated status and many more. ME Analyzer is also a powerful Engine firmware research analysis tool with multiple structures which allow, among others, full parsing and unpacking of Converged Security Engine (CSE) code & file system, Flash Partition Table (FPT), Boot Partition Descriptor Table (BPDT/IFWI), CSE Layout Table (LT), advanced Size detection etc. Moreover, with the help of its extensive database, ME Analyzer is capable of uniquely categorizing all supported Engine firmware as well as check for any firmware which have not been stored at the Intel Engine Firmware Repositories yet.

A1. ME Analyzer Features

- Supports all Engine firmware Families (CS)ME 2-14, (CS)TXE 0-4, (CS)SPS 1-5
- Supports all types of firmware images (Engine Regions, SPI/BIOS etc)
- Detection of Family, Version, SKU, Date, Revision, Platform etc info
- Detection of Production, Pre-Production, ROM-Bypass etc Releases
- Detection of Region (Stock/clean or Extracted/dirty), Update etc Types
- Detection of Security Version Numbers (SVN), Version Control Number (VCN)
- Detection of Power Management Controller (PMC) firmware Version, SKU etc
- Detection of whether the imported Engine firmware is updated or not
- Detection of unusual Engine firmware (Corrupted, Compressed, OEM etc)
- Ability to fully unpack CSE firmware CSME 11+, CSTXE 3+ and CSSPS 4+
- Ability to validate Engine RSA Signature and Region table checksums
- Advanced detection & validation of Engine region's firmware Size
- Ability to detect & analyze Integrated Firmware Images (IFWI/BPDT)
- Ability to analyze multiple files by drag & drop or by input path
- Detection of unique Apple Macintosh Engine firmware "Slim" SKUs
- Detection of multiple Engine regions in input file, number only
- Ability to detect & categorize firmware which require attention
- Reports all firmware which are not found at the Engine Firmware Repositories
- Reports any new, unknown, problematic, incomplete etc Engine firmware images
- Features command line parameters to enhance functionality & assist research
- Features user friendly messages & proper handling of unexpected code errors
- Shows colored text to signify the importance of notes, warnings & errors
- Open Source project under permissive license, comment assisted code

A2. Engine Firmware Repository Database

ME Analyzer allows end-users and/or researchers to quickly analyze and/or report new firmware versions without the use of special Intel tools (FIT/FITC, FWUpdate) or Hex Editors. To do that effectively, a database had to be built. The [Intel Engine Firmware Repositories](#) is a collection of every (CS)ME, (CS)TXE & (CS)SPS firmware we have found. Its existence is very important for ME Analyzer as it allows us to continue doing research, find new types of firmware, compare same major version releases for similarities, check for updated firmware etc. Bundled with ME Analyzer is a file called MEA.dat which is required for the program to run. It includes entries for all Engine firmware that are available to us. This accommodates primarily three actions: a) Detect each firmware's Family via unique identifier keys, b) Check whether the imported firmware

is up to date and c) Help find new Engine firmware sooner by reporting them at the [Intel Management Engine: Drivers, Firmware & System Tools](#) or [Intel Trusted Execution Engine: Drivers, Firmware & System Tools](#) threads respectively.

B. How to use ME Analyzer

There are two ways to use ME Analyzer, MEA executable & Command Prompt. The MEA executable allows you to drag & drop one or more firmware and analyze them one by one or recursively scan entire directories. To manually call ME Analyzer, a Command Prompt can be used with -skip as parameter.

B1. ME Analyzer Executable

To use ME Analyzer, select one or multiple files and Drag & Drop them to its executable. You can also input certain optional parameters either by running MEA directly or by first dropping one or more files to it. Keep in mind that, due to operating system limitations, there is a limit on how many files can be dropped at once. If the latter is a problem, you can always use the -mass parameter to recursively scan entire directories as explained below.

B2. ME Analyzer Parameters

There are various parameters which enhance or modify the default behavior of ME Analyzer:

- -? : Displays help & usage screen
- -skip : Skips welcome & options screen
- -exit : Skips Press enter to exit prompt
- -mass : Scans all files of a given directory
- -pdb : Writes input file DB entry to text file
- -dbname : Renames input file based on unique DB name
- -dfpt : Shows \$FPT, BPDt and/or CSE Layout Table headers
- -unp86 : Unpacks all CSE Converged Security Engine firmware
- -bug86 : Enables pausing on error during CSE unpacking
- -ver86 : Enables full verbose output during CSE unpacking
- -html : Writes parsable HTML files during MEA operation
- -json : Writes parsable JSON files during MEA operation

B3. ME Analyzer Error Control

During operation, ME Analyzer may encounter issues that can trigger Notes, Warnings and/or Errors. Notes (yellow/green color) provide useful information about a characteristic of this particular firmware. Warnings (purple color) notify the user of possible problems that can cause system instability. Errors (red color) are shown when something unexpected or problematic is encountered.

C. Download ME Analyzer

ME Analyzer consists of three files, the executable (MEA.exe or MEA) and the databases (MEA.dat & Huffman.dat). An already built/frozen/compiled binary is provided by me for Windows only (icon designed by [Those Icons](#)). Thus, **you don't need to manually build/freeze/compile ME Analyzer under Windows**. Instead, download the latest version from the [Releases](#) tab, title should be "ME Analyzer v1.X.X". You may need to scroll down a bit if there are DB releases at the top. The latter can be used to update the outdated DB which was bundled with the latest executable release, title should be "DB rXX". To extract the already built/frozen/compiled archive, you need to use programs which support RAR5 compression.

C1. Compatibility

ME Analyzer should work at all Windows, Linux or macOS operating systems which have Python ≥ 3.7 support. Windows users who plan to use the already built/frozen/compiled binary must make sure that they have the latest Windows Updates installed which include all required "Universal C Runtime (CRT)" libraries.

C2. Code Prerequisites

To run ME Analyzer's python script, you need to have the following 3rd party Python modules installed:

- [Colorama](#)

pip3 install colorama

- [CRCCheck](#)

pip3 install crccheck

- [PLTable](#)

pip3 install pltable

C3. Build/Freeze/Compile with PyInstaller

PyInstaller can build/freeze/compile ME Analyzer at all three supported platforms, it is simple to run and gets updated often.

1. Make sure Python 3.7.0 or newer is installed:

python --version

2. Use pip to install PyInstaller:

pip3 install pyinstaller

3. Use pip to install colorama:

pip3 install colorama

4. Use pip to install crccheck:

pip3 install crccheck

5. Use pip to install PLTable:

pip3 install pltable

6. Build/Freeze/Compile ME Analyzer:

pyinstaller --noup --onefile MEA.py

At dist folder you should find the final MEA executable

C4. Anti-Virus False Positives

Some Anti-Virus software may claim that the built/frozen/compiled MEA executable contains viruses. Any such detection are false positives, usually of PyInstaller. You can switch to a better Anti-Virus software, report the false positive to their support, add the MEA executable to the exclusions, build/freeze/compile MEA yourself or use the Python script directly.

D. Pictures

Note: Some pictures are outdated and depict older ME Analyzer versions.

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FWUpdate Support	Yes
Date	2019-08-05
File System State	Configured
Size	0x274000
Flash Image Tool	12.0.45.1509
Latest	Yes

Power Management Controller

Family	PMC
Version	300.2.11.1020
Release	Production
Type	Independent
Chipset SKU	H
Chipset Stepping	B
TCB Security Version Number	3
ARB Security Version Number	3
Version Control Number	0

-----[ME Analyzer v1.33.0 r104]-----

File: P5B-VM-DO-ASUS-1002.ROM (1/3)

Family: ME
Version: 2.0.4.1122
Release: Production
Type: Region, Extracted
FD: Locked
SKU: AMT
Date: 2006-07-29
Size: 0xE6000
Platform: Desktop
Latest: No


File: W25HNQ.07 (2/3)

Family: ME
Version: 7.0.4.1197
Release: Production
Type: Region, Extracted
FD: Locked
SKU: 1.5MB
Date: 2011-02-01
Size: 0x17D000
Platform: CPT
Blist 0: <= 7.0.3.1194
Blist 1: <= 7.1.2.1049
Latest: No

File: APLITX1.30 (3/3)

Family: CSE TXE
Version: 3.0.2.1108
Release: Production
Type: Region, Extracted
FD: Locked
Rev: Bx
SVN: 1
VCN: 2
PV: No
Date: 2016-08-22
FIT Ver: 3.0.2.1108
Platform: APL
Latest: No

Press enter to exit

 ME Analyzer v1.33.0

-----[ME Analyzer v1.33.0 r104]-----

File: 04.08.04.026_PRD_REC.bin (1/1)

Family: CSE SPS

Version: 04.08.04.026

Release: Production

Type: Recovery

SVN: 3

VCN: 0

PV: No

Date: 2017-09-27

Note: This firmware was not found at the database, please report it!

Press enter to exit

```
C:\Users\Plato\Documents\Projects\PycharmProjects\MEA>MEA -skip -mass -check -enuf
```

```
Type the full folder path : C:\Intel CSME 11.20 Firmware Repository Pack r2\
```

```
Found 3 file(s)
```

```
Press enter to start
```

```
File:      11.20.0.1242_COR_H_B0-S0_PRD_EXTR.bin (1/3)
```

```
Family:    CSE ME
Version:   11.20.0.1242
Release:   Production
Type:      Region, Extracted
SKU:       Corporate H
Rev:       B0-S0
SVN:       1
VCN:       179
LBG:       Yes
PV:        Yes
Date:      2017-03-08
FIT Ver:   11.20.0.1242
FIT SKU:   PCH-H C621
Size:      0x603000
Platform:  LBG
Latest:    No
```

```
File:      11.20.0.1249_COR_H_B0-S0_PRD_EXTR.bin (2/3)
```

```
Family:    CSE ME
Version:   11.20.0.1249
Release:   Production
Type:      Region, Extracted
SKU:       Corporate H
Rev:       B0-S0
SVN:       1
VCN:       181
LBG:       Yes
PV:        Yes
Date:      2017-04-24
FIT Ver:   11.20.0.1288
```

-----[ME Analyzer v1.33.0 r104]-----

File: 11.8.50.3425_COR_LP_C0_NPDM_PRD_RGN.bin (1/1)

Flash Partition Table (\$FPT)				
Name	Owner	Offset	Size	Empty
FTPR		0x00001000	0x0012F000	No
FTUP		0x00272000	0x0038E000	No
DLMP		0x0012E000	0x00003000	No
PSVN		0x00000E00	0x00000200	Yes
IVBP		0x0026E000	0x00004000	Yes
MFS		0x00130000	0x0013E000	No
NFTP		0x00272000	0x0030B000	No
ROMB				Yes
WCOD		0x0057D000	0x00080000	No
LOCL		0x005FD000	0x00003000	No
FLOG		0x00600000	0x00001000	Yes
UTOK		0x00601000	0x00002000	Yes
ISHC		0x00603000	0x00031000	No

Family: CSE ME
Version: 11.8.50.3425
Release: Production
Type: Region, Stock
SKU: Corporate LP
Rev: C0
SVN: 3

-----[ME Analyzer v1.33.0 r104]-----

File: SPI.bin (1/1)

Boot Partition Descriptor Table (BPDT)						
Name	Type	Partition	Offset	Size	Empty	
IDLM	09	Primary			Yes	
IFP_OVERRIDE	10	Primary	0x00000200	0x00000208	No	
S-BPDT	05	Primary	0x00175000	0x000C7000	No	
ISHC	08	Secondary	0x00176000	0x00040000	No	
IUNP	15	Secondary	0x001B6000	0x00002000	No	
WCOD	18	Secondary	0x001B8000	0x00080000	No	
LOCL	19	Secondary	0x00238000	0x00004000	No	
RBEP	01	Primary	0x00001000	0x00010000	No	
UFS_PHY	12	Primary			Yes	
UFS_GPP_LUN	13	Primary			Yes	
FTPR	02	Primary	0x00021000	0x00154000	No	
UEP	17	Primary			Yes	
PMCP	14	Primary	0x00011000	0x00010000	No	
DEBUG_TOKENS	11	Primary	0x00175000		Yes	

Boot Partition Descriptor Table (BPDT)						
Name	Type	Partition	Offset	Size	Empty	
IDLM	09	Primary			Yes	
IFP_OVERRIDE	10	Primary			Yes	
S-BPDT	05	Primary	0x003FE200	0x00270F00	No	

-----[ME Analyzer v1.33.0 r104]-----

File: 11.11.50.1402_CON_H_D0_PRD_EXTR.bin (1/1)

Flash Partition Table ROMB		
Instruction 0		N/A
Instruction 1		N/A
Instruction 2		N/A
Instruction 3		N/A

Flash Partition Table Header		
Tag		\$FPT
Partition Count		11
Header Version		0x20
Entry Version		0x10
Header Size		0x20
Header Checksum		0xD4
Ticks To Add		0xFFFF
Tokens To Add		0xFFFF
Reserved		0x0
Flash Layout		4K
Flash Image Tool		11.11.50.1402

\$FPT Checksum is VALID

\$FPT Checksum is VALID

Detected 11 Partition(s) at \$FPT [0x000000]							
Name	Start	End	ID	Type	Valid	Empty	
FTPR	0x001000	0x0A8000	N/A	Code	Yes	No	
FTUP	0x110000	0x1BC000	N/A	Code	Yes	No	
DLMP	0x000000	0x000000	N/A	Code	No	Yes	
PSVN	0x000E00	0x001000	N/A	ROM/Data/Generic	Yes	Yes	
IVBP	0x10C000	0x110000	N/A	ROM/Data/Generic	Yes	Yes	
MFS	0x0A8000	0x10C000	N/A	ROM/Data/Generic	Yes	No	
NFTP	0x110000	0x1BC000	N/A	Code	Yes	No	
ROMB	0x000000	0x000000	N/A	Code	No	Yes	
FLOG	0x1BC000	0x1BD000	N/A	ROM/Data/Generic	Yes	Yes	
UTOK	0x1BD000	0x1BF000	N/A	ROM/Data/Generic	Yes	Yes	
ISHC	0x000000	0x000000	N/A	Code	No	Yes	

--> Stored Flash Partition Table [0x000000 - 0x001000]

--> Stored \$FPT Code Partition "FTPR" [0x001000 - 0x0A8000]

--> Stored \$FPT Code Partition "FTUP" [0x110000 - 0x1BC000]

--> Stored \$FPT ROM/Data/Generic Partition "MFS" [0x0A8000 - 0x10C000]

--> Stored \$FPT Code Partition "NFTP" [0x110000 - 0x1BC000]

Reserved	0x0
----------	-----

MFS Data Page Header 7623 CRC-8 is VALID

MFS Page Header	
Signature	AA557887
Page Number	7631
Erase Count	44
Next Erase Page Index	64
First Chunk Index	18032
CRC-8	0xCE
Reserved	0x0

MFS Data Page Header 7631 CRC-8 is VALID

MFS Data Page 7631 Chunks (5) CRC-16 are all VALID

MFS Page Header	
Signature	AA557887
Page Number	7609
Erase Count	44
Next Erase Page Index	41
First Chunk Index	18154
CRC-8	0xE8
Reserved	0x0

MFS Data Page Header 7609 CRC-8 is VALID

MFS Data Page 7609 Chunks (5) CRC-16 are all VALID

MFS Volume Header	
Signature	724F6201
Version	1
Volume Size	0x11D900
File Record Count	1024

--> Stored \$FPT Code Partition "NFTP" [0x110000 - 0x1BC000]

Code Partition Directory Header		
Tag	\$CPD	
Module Count	45	
Header Version	1	
Entry Version	1	
Header Size	0x10	
Checksum	0xCA	
Partition Name	FTPR	

\$CPD Checksum of partition "FTPR" is VALID

Detected 45 Module(s) at FTPR [0x001000]							
Name	Compression	Encryption	Offset	Compressed	Uncompressed	Empty	
FTPR.man	Uncompressed	No	0x001448	0x000BD0	0x000BD0	No	
rbe.met	Uncompressed	No	0x002018	0x000096	0x000096	No	
kernel.met	Uncompressed	No	0x0020AE	0x00008E	0x00008E	No	
syslib.met	Uncompressed	No	0x00213C	0x000064	0x000064	No	
bup.met	Uncompressed	No	0x0021A0	0x0005AA	0x0005AA	No	
pm.met	Uncompressed	No	0x00274A	0x0000AE	0x0000AE	No	
vfs.met	Uncompressed	No	0x0027F8	0x000960	0x000960	No	
extdisp.met	Uncompressed	No	0x003158	0x00018E	0x00018E	No	

touch_fw	LZMA	No	0x09F980	0x00373B	0x008000	No
----------	------	----	----------	----------	----------	----

--> Stored Uncompressed metadata "FTPR.man" [0x001448 - 0x002017]

MN2: D76ED4AA5F3229780528C89798A71D544E31973287666C2596F457D086AEFA87

MEA: D76ED4AA5F3229780528C89798A71D544E31973287666C2596F457D086AEFA87

Partition Manifest Header	
Header Type	4
Header Size	0x284
Header Version	0x10000
PV Release	Yes
Flags Reserved	0x0
Debug Signed	No
Vendor ID	0x8086
Date	2017-09-26
Manifest Size	0xBD0
Manifest Tag	\$MN2
Unknown	0x6DD19100
Version	11.11.50.1402
Security Version Number	3
Reserved 0	0x0
Reserved 1	0x0
Reserved 2	0x0

```
Hash of Uncompressed metadata "touch_fw.met" is VALID

--> Stored Huffman module "rbe" [0x004A00 - 0x0070CF]

Decompressed Huffman module "rbe" via Huffman11 by IllegalArgument

MOD: 58E527092EC64EC1486666AFCDAB3197B563A78B8BBA0D1796BB0A5D226980E1
MEA: 58E527092EC64EC1486666AFCDAB3197B563A78B8BBA0D1796BB0A5D226980E1

Hash of Huffman module "rbe" is VALID

--> Stored Huffman module "kernel" [0x007100 - 0x01714F]

Decompressed Huffman module "kernel" via Huffman11 by IllegalArgument

MOD: D8F4A6BDCDF6338B1E36FD3191060A1049E6A2D6E6584A2D1155EF57F477AFBB
MEA: D8F4A6BDCDF6338B1E36FD3191060A1049E6A2D6E6584A2D1155EF57F477AFBB

Hash of Huffman module "kernel" is VALID

--> Stored Huffman module "syslib" [0x017180 - 0x029017]

Decompressed Huffman module "syslib" via Huffman11 by IllegalArgument

MOD: CB68E34E2A79A5468F7D569704EE793C144D3036BB6D9A8D646453AE6665315B
MEA: CB68E34E2A79A5468F7D569704EE793C144D3036BB6D9A8D646453AE6665315B

Hash of Huffman module "syslib" is VALID

--> Stored Huffman module "bup" [0x029040 - 0x05340B]

Decompressed Huffman module "bup" via Huffman11 by IllegalArgument

MOD: 856291E8193E6FAF6C5EBDC781BB327C8C57590187F47CC93DAEF80AE2F84A75
MEA: 856291E8193E6FAF6C5EBDC781BB327C8C57590187F47CC93DAEF80AE2F84A75

Hash of Huffman module "bup" is VALID

--> Stored LZMA module "pm" [0x053440 - 0x055A28]

Decompressed LZMA module "pm" via Python

MOD : 78A05443DBCC1DF623166A791A14A5667F2A3B9C553B52BD2C266771664A81C3
```

RSA Public Key	C8D4AAB0 [...]
RSA Exponent	0x10001
RSA Signature	36254F8D [...]
Extension 3, Partition Information	
Tag	0x03
Size	0x468
Partition Name	NFTP
Partition Size	0xAC000
Hash	0A689B1A17F53E29A69DE53E27DE48DAFB2935E4CB49181240AC98671B581E2
Version Control Number	269
Partition Version	0x10000000
Data Format Version	0x10000
Instance ID	0x00000001
Flags	0x0
Reserved	FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
Unknown	0x3
Extension 3, Module Information	
Name	vdm
Type	Process
Compression	Uncompressed
Reserved	0xFFFF


Extension 0, Independent Partition		
Name	ISHC	
Version	0x10000000	
User ID	0x0001	
Reserved	0x1	
Extension 12, Client System Information		
Tag	0x0C	
Size	0x30	
SKU Capabilities	0xA011A7D0	
SKU Capabilities Reserved	FF * 28	
CSE Size	0x0	
SKU Type	Consumer	
Lewisburg	No	
M3	No	
M0	Yes	
SKU Platform	H	
Si Class	2	
Reserved	0x0	
Extension 2, Feature Permissions		
Tag	0x02	
Size	0x18	

Module Count		41
Extension 1, Entry		
Partition Name	FTPR	
Module Name	kernel	
IBL	Yes	
Removable	No	
Init Immediately	Yes	
Restart Policy	Not Allowed	
CM0 UMA	No	
CM0 No UMA	No	
CM3	No	
Init Flow Reserved	0x0	
Normal	Yes	
HAP	No	
HMRFP0	No	
Temp Disable	No	
Recovery	Yes	
Safe Mode	No	
FWUpdate	No	
Boot Type Reserved	0x0	
Extension 1, Entry		


> MEA > dump_corporate.bin > MFS 0000 [0x130000] > 008 Home Directory > home

	Name	Type	Size
SS	amt	File folder	
	amt-storage	File folder	
(F:)	bup	File folder	
	cls	File folder	
	dal_ivm	File folder	
	dal_sdm	File folder	
	defaults	File folder	
	fpf	File folder	
	fwupdate	File folder	
	gde	File folder	
	gpio	File folder	
	hotham	File folder	
	icc	File folder	
	ish_srv	File folder	
	loadmgr	File folder	
	manuf	File folder	
	mca	File folder	
	mca_temp	File folder	
	mctp	File folder	
	nfc	File folder	
	nvinf	File folder	
	pavp	File folder	
	pmt	File folder	
	policy	File folder	
	ptt	File folder	
	rosm	File folder	
	RTFD	File folder	
	secureboot	File folder	
	sensor	File folder	
	sigma	File folder	
	smbus	File folder	
	tcb	File folder	
	touch_fw	File folder	
	usbr	File folder	
	wlan_drv	File folder	
	amt.txt	Text Document	3 KB
	amt_integrity.txt	Text Document	4 KB
	amt-storage.txt	Text Document	3 KB
	amt-storage_integrity.txt	Text Document	4 KB
	bup.txt	Text Document	3 KB
	bup_integrity.txt	Text Document	4 KB
	cls.txt	Text Document	3 KB
	cls_integrity.txt	Text Document	4 KB


File System	Index	Name	Type	Size	Integrity	Encryption	Anti-Rep
home	8	.	Folder	0x0	Yes	No	No
root	0	..	Folder	0x0	No	No	No
home	9	RTFD	Folder	0x0	Yes	No	No
home	9	.	Folder	0x0	Yes	No	No
home	8	..	Folder	0x0	Yes	No	No
home	11	amt	Folder	0x0	Yes	No	No
home	11	.	Folder	0x0	Yes	No	No
home	8	..	Folder	0x0	Yes	No	No
home	12	rtfd	Folder	0x0	Yes	No	No
home	12	.	Folder	0x0	Yes	No	No
home	11	..	Folder	0x0	Yes	No	No
home	13	acl	Folder	0x0	Yes	No	No
home	13	.	Folder	0x0	Yes	No	No
home	12	..	Folder	0x0	Yes	No	No
home	252	admin.realm	File	0x41	No	No	No
home	255	oapwd	File	0x25	No	No	No
home	509	tnf0	File	0x5B	Yes	Yes	No
home	511	tnf1	File	0x5B	Yes	Yes	No
home	513	tnf2	File	0x5B	Yes	Yes	No
home	18	ap	Folder	0x0	Yes	No	No
home	18	.	Folder	0x0	Yes	No	No
home	12	..	Folder	0x0	Yes	No	No
home	20	cb	Folder	0x0	Yes	No	No
home	20	.	Folder	0x0	Yes	No	No
home	12	..	Folder	0x0	Yes	No	No

 ME Analyzer v1.33.0

```
-----[ ME Analyzer v1.33.0 r104 ]-----  
File:      partial_10.0.bin (1/1)  
Family:    ME  
Version:   10.0.0.1168  
Release:   Production  
Type:      Partial Update  
Date:      2014-02-19  
Platform:  WPT-LP  
  
Press enter to exit
```

 ME Analyzer v1.33.0

```
-----[ ME Analyzer v1.33.0 r104 ]-----  
File:      unidentifiable.bin (1/1)  
  
Found unidentifiable Intel Engine firmware  
  
Press enter to exit
```

 ME Analyzer v1.33.0

```
-----[ ME Analyzer v1.33.0 r104 ]-----  
File:      rec_fpt_ver.bin (1/1)  
  
Found Unknown Intel Engine Flash Partition Table v8.1.0.1248  
  
Press enter to exit
```


-----[ME Analyzer v1.33.0 r104]-----

File: error.bin (1/1)
Family: ME
Version: 8.1.51.1727
Release: Production
Type: Region, Extracted
SKU: 1.5MB
SVN: 1
VCN: 2
PV: Yes
Date: 2013-08-28
FITC Ver: 8.1.51.1471
Size: 0x17D000
Platform: PPT

Error: Invalid FTPR RSA Signature! *

* Please report this issue!

Note: This firmware was not found at the database, please report it!

Press enter to exit