

# Infineon TPM Vulnerability

## List of affected FUJITSU Products

On [their web page](#) (October 10, 2017), Infineon published security information about a research team developed advanced mathematical methods to analyse and exploit weaknesses in acceleration algorithms for prime number finding, which are common practice today for RSA key generation.

**Last revised:** May 09, 2018

### Attention:

- Fujitsu recommends updating the BIOS to latest released version, before applying TPM firmware update.

### Notes

- This list provides an overview of affected Fujitsu products and remediation tools that apply for each of them.
- This list is updated regularly.
- In the below table, you can see when the remediation tools for each affected product will be available:

Tool number	Availability
<a href="#">Tool 1</a>	27.10.2017 (WIN7, WIN10); 13.12.2017 (WIN8)
Tool 2: <a href="#">USB Stick Version</a> / <a href="#">Admin-Version</a>	27.10.2017 / 15.12.2017 (Admin-Version)
<a href="#">Tool 3</a>	09.02.2018 (WIN7, WIN10); 07.03.2018 (WIN8)
<a href="#">Tool 4</a>	10.10.2017 (WIN7, WIN10); 13.12.2017 (WIN8)
<a href="#">Tool 5</a> (End-customer Tool and Admin-Version)	26.04.2018 (release of new version)
<a href="#">Tool 6</a>	27.10.2017 (Windows Operating Systems only)
<a href="#">Tool 7</a>	27.10.2017 (Operating System independent)
Tool 8	Release date not yet confirmed (Linux Operating System)
Tool 9	Release date not yet confirmed

### OEM Mainboards

Affected mainboards	Used TPM Version	Fixed with tool	Minimum required BIOS version
D3243-S1	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S1 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S2 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S3 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S4 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S5 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency

D3313-S6 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S7 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S8 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3313-S9 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3348-B1	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
D3348-B2	Infineon SLB9665 TT2.0 FW5.51	Not planned	
D3402-B1	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.14.0
D3402-B1 (<GS3)	Infineon SLB9665 TT2.0 FW5.50	Tool 2	R1.14.0
D3402-B2	Infineon SLB9665 TT2.0 FW5.60	Tool 2	No dependency
D3417-B1 (B11; < GS3)	Infineon SLB9665 TT2.0 FW5.50	Tool 2	R1.14.0
D3417-B1	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.14.0
D3417-B2	Infineon SLB9665 TT2.0 FW5.60	Tool 2	No dependency
D3433-S1	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.21.0
D3433-S2	Infineon SLB9665 TT2.0 FW5.61	Tool 2	No dependency
D3441-S1	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.21.0
D3441-S2	Infineon SLB9665 TT2.0 FW5.61	Tool 2	No dependency
D3446-S1	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.21.0
D3446-S2	Infineon SLB9665 TT2.0 FW5.61	Tool 2	No dependency

### Desktop PC (ESPRIMO)

Affected model	Used TPM Version	Fixed with tool	Minimum required BIOS version
ESPRIMO P956	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.50	Tool 2 Tool 2	R1.14.0
ESPRIMO Q956	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.50	Tool 2 Tool 2	R1.14.0
ESPRIMO D556 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
ESPRIMO D556/2 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
ESPRIMO D756 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
ESPRIMO D956	Infineon SLB9665 TT2.0 FW5.50 Infineon SLB9665 TT2.0 FW5.51	Tool 2 Tool 2	R1.14.0
ESPRIMO X956	Infineon SLB9665 TT2.0 FW5.51	Tool 2	R1.14.0
ESPRIMO P557 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
ESPRIMO P757 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
ESPRIMO P957	Infineon SLB9665 TT2.0 FW5.60 / 5.61	Tool 2	No dependency
ESPRIMO Q957, MRE	Infineon SLB9665 TT2.0 FW5.60 / 5.61	Tool 2	No dependency
ESPRIMO D757 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency

ESPRIMO D957	Infineon SLB9665 TT2.0 FW5.60 / 5.61	Tool 2	No dependency
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### Thin Client (FUTRO)

Affected model	Used TPM Version	Fixed with tool
FUTRO S720/S920 (only with optional TPM 1.2 module)	Infineon SLB9660 TT1.2 FW4.40	Tool 1

### Workstation (CELSIUS)

Affected model	Used TPM Version	Fixed with tool	Minimum required BIOS version
CELSIUS C740	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 1 Not planned	No dependency
CELSIUS M740/M740 Power	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 1 Not planned	No dependency
CELSIUS R940/R940 Power	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 1 Not planned	No dependency
CELSIUS J550	Infineon SLB9660 TT1.2 FW4.40	Tool 1	No dependency
CELSIUS J550/2	Infineon SLB9665 TT2.0 FW5.60	Tool 2	No dependency
CELSIUS W570, POWER, POWER+	Infineon SLB9665 TT2.0 FW5.60	Tool 2	No dependency
CELSIUS W550, W550 POWER	Infineon SLB9665 TT2.0 FW5.50 Infineon SLB9665 TT2.0 FW5.51	Tool 2 Tool 2	R1.14.0

### Mobile (LIFEBOOK/STYLISTIC/CELSIUS)

Affected model	Used TPM Version	Fixed with tool	Minimum required BIOS version
LIFEBOOK A555	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
LIFEBOOK A556, A556/G, AH556	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	V1.23 No dependency
LIFEBOOK E544	Infineon SLB9655 TT1.2 FW4.32 Infineon SLB96xx TT1.2 FW4.40	Tool 3 Tool 4	No dependency No dependency
LIFEBOOK E546	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	vPro: V1.15, Non-vPro: V1.22 No dependency
LIFEBOOK E547 (non vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.07
LIFEBOOK E547 (vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.10
LIFEBOOK E554	Infineon SLB9655 TT1.2 FW4.32 Infineon SLB96xx TT1.2 FW4.40	Tool 3 Tool 4	No dependency No dependency
LIFEBOOK E556	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	vPro: V1.15, Non-vPro: V1.22 No dependency
LIFEBOOK E557 (non vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.07
LIFEBOOK E557 (vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.10
LIFEBOOK E734	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK E736	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	vPro: V1.18, non-vPro: 1.24 No dependency
LIFEBOOK E744	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK E746	Infineon SLB9665 TT2.0 FW5.51	Tool 5	vPro: V1.18, non-vPro: 1.24

	Infineon SLB96xx TT1.2 FW4.40	Tool 4	No dependency
LIFEBOOK E754	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK E756	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	vPro: V1.18, non-vPro: 1.24 No dependency
LIFEBOOK S904	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK S935	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
LIFEBOOK S936	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	V1.14 No dependency
LIFEBOOK S937	Infineon SLB9665 TT2.0 FW5.51	Tool 5	V1.04
LIFEBOOK T725	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
LIFEBOOK T726	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 4 Tool 5	No dependency V1.13
LIFEBOOK T734	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK T904	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK T935	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
LIFEBOOK T936	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 4 Tool 5	No dependency V1.12
LIFEBOOK T937	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.08
LIFEBOOK U727 (non vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U727 (vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U727 6 <sup>th</sup> Generation	Infineon SLB9655 TT1.2 FW4.32 Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.61	Tool 3 Tool 5 Tool 5	No dependency V1.01 V1.01
LIFEBOOK U745	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51	Tool 4 Tool 5	No dependency No dependency
LIFEBOOK U747 (non vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U747 (vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U747 6 <sup>th</sup> Generation	Infineon SLB9655 TT1.2 FW4.32 Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.61	Tool 3 Tool 5 Tool 5	No dependency V1.01 V1.01
LIFEBOOK U757 (non vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U757 (vPro)	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.13
LIFEBOOK U757 6 <sup>th</sup> Generation	Infineon SLB9655 TT1.2 FW4.32 Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.61	Tool 3 Tool 5 Tool 5	No dependency V1.01 V1.01
LIFEBOOK U904	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
LIFEBOOK U937	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.06
LIFEBOOK P727	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.08
STYLISTIC Q616	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	V1.09 No dependency
STYLISTIC Q665	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
STYLISTIC Q704	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency
STYLISTIC Q736	Infineon SLB9665 TT2.0 FW5.51 Infineon SLB96xx TT1.2 FW4.40	Tool 5 Tool 4	V1.12 No dependency
STYLISTIC Q775	Infineon SLB9660 TT1.2 FW4.40	Tool 4	No dependency
STYLISTIC R726	Infineon SLB96xx TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.51 Infineon SLB9665 TT2.0 FW5.61	Tool 4 Tool 5 Tool 5	No dependency V1.18 V1.18
STYLISTIC R727	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.16

CELSIUS H970	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.11
CELSIUS H760	Infineon SLB9665 TT2.0 FW5.51	Tool 5	V1.18
CELSIUS H770	Infineon SLB9665 TT2.0 FW5.61	Tool 5	V1.05
CELSIUS H730	Infineon SLB9655 TT1.2 FW4.32	Tool 3	No dependency

### PRIMERGY (BX/RX/TX)

(PRIMERGY CX and PRIMEQUEST Systems are not affected)

Affected model	Used TPM Version	Fixed with tool
BX2560 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
BX2580 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
BX2560 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
BX2580 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX1330 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
RX1330 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX1330 M3	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX2510 M2	Infineon SLB9665 TT2.0 FW5.61	Tool 7
RX2530 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
RX2530 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX2520 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
RX2540 M1	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX2540 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX2560 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
RX2560 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
RX4770 M3	Infineon SLB9665 TTL2.0 FW5.50	Tool 9
TX1310 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
TX1310 M3	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
TX1320 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
TX1320 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
TX1320 M3	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
TX1330 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
TX1330 M2	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
TX1330 M3	Infineon SLB9660 TT1.2 FW4.40 Infineon SLB9665 TT2.0 FW5.61	Tool 6 Tool 7
TX2540 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
TX2560 M1	Infineon SLB9660 TT1.2 FW4.40	Tool 6
TX2560 M2	Infineon SLB9660 TT1.2 FW4.40	Tool 6

	Infineon SLB9665 TT2.0 FW5.61	Tool 7
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