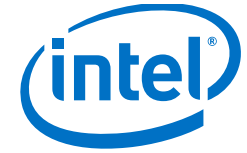


# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)



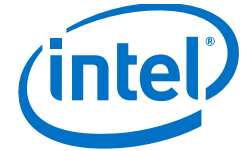
## Revision History:

Revision	Date	Description
1.0	01-27-2020	Initial Release

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

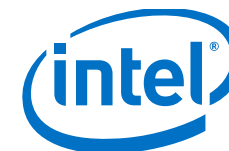
[secure@intel.com](mailto:secure@intel.com)



## Planned Microcode Updates

Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
Amber Lake Y	8th Generation Intel® Core™ Processor Family	Intel® Core™ i7-8665U Processor, i7-8557U, i7-8850H, i7-8809G with Radeon™ RX Vega M GH graphics, i7-8750HF, i7-8750H, i7-8709G with Radeon™ RX Vega M GH graphics, i7-8706G with Radeon™ RX Vega M GL graphics, i7-8706G with Radeon™ Pro WX Vega M GL graphics, i7-8705G with Radeon™ RX Vega M GL graphics, i7-8700B, i7-8569U, i7-8650U, i7-8565U, i7-8560U, i7-8559U, i7-8550U, i7-8500Y	Mobile	806E9	10	Yes
Amber Lake Y	10th Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-10510Y, i5-10310Y Intel® Core™ Processor i5-10210Y, i5-10110Y	Mobile	806EC	94	Yes
Amber Lake Y	10th Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-10510Y, i5-10310Y Intel® Core™ Processor i5-10210Y, i5-10110Y	Mobile	806EC	94	Yes
Cascade Lake Server	2 <sup>nd</sup> Generation Intel® Xeon® Scalable Processors	Intel® Xeon® Platinum Processor 8253, 8256, 8260, 8260L, 8260M, 8260Y, 8268, 8270, 8276, 8276L, 8276M, 8280, 8280L, 8280M, 9220, 9221, 9222, 9242, 9282 Intel® Xeon® Gold Processor 5215, 5215L, 5215M, 5215R, 5217, 5218, 5218B, 5218N, 5218T, 5220, 5220R, 5220S, 5220T, 5222, 6222V, 6226, 6230, 6230N, 6230T, 6234, 6238, 6238L, 6238M, 6238T, 6240, 6240L, 6240M, 6240Y, 6242, 6244, 6246, 6248, 6252, 6252N, 6254, 6262V Intel® Xeon® Silver Processor 4208, 4208R, 4209T, 4210, 4210R, 4214, 4214C, 4214R, 4214Y, 4215, 4216, 4216R Intel® Xeon® Bronze Processor 3204, 3206R	Server	50657	BF	Yes
Cascade Lake W	Intel® Xeon® W Processor Family	Intel® Xeon® Processor W-3275M, W-3275, W-3265M, W-3265, W-3245M, W-3245, W-3235, W-3225, W-3223, W-2295, W-2275, W-2265, W-2255, W-2245, W-2235, W-2225, W-2223	Workstation	50657	BF	Yes

# Microcode Update Guidance



Intel Product Security Incident Response Team (PSIRT)  
[secure@intel.com](mailto:secure@intel.com)

Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
Cascade Lake X	Intel® Core™ X-series Processor	Intel® Core™ X-series Processor i9-10940X, i9-10920X, i9-10900X, i9-9960X, i9-9940X, i9-9920X, i9-9900X, i9-9820X, i9-9800X, i9-7960X, i9-7940X, i9-7920X, i9-7900X, i7-7820X, i7-7800X, i7-7740X, i7-7640X	Desktop	50657	B7	Yes
Coffee Lake H (6+2)	8 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i9-8950HK Intel® Core™ Processor i7-8700B, i7-8750H, i7-8850H Intel® Core™ Processor i5-8300H, i5-8400B, i5-8400H, i5-8500B	Mobile	906EA	22	Yes
Coffee Lake H (8+2)	9 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i9-9980HK, 9880H Intel® Core™ Processor i7-9850H, 9750HF Intel® Core™ Processor i5-9400H, 9300H	Mobile	906EC	22	Yes
Coffee Lake S (6+2)	8 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-8670, i7-8670T, i7-8700, i7-8700T Intel® Core™ Processor i5-8400, i5-8400T, i5-8420, i5-8420T, i5-8500, i5-8500T, i5-8550, i5-8600, i5-8600T, i5-8650	Desktop	906EA	22	Yes
Coffee Lake S (8+2)	9 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i9-9900K, i9-9900KF Intel® Core™ Processor i7-9700K, i7-9700KF Intel® Core™ Processor i5-9600K, i5-9600KF, i5-9400, i5-9400F	Desktop	906EC	22	Yes
Coffee Lake S (4+2) (B0)	8 <sup>th</sup> Generation Intel® Core™ Processor Family Intel® Pentium® Gold Processor Series Intel® Celeron® Processor G Series	Intel® Core™ Processor i3-8000, i3-8000T, i3-8020, i3-8100, i3-8100, i3-8100H, i3-8100T, i3-8120, i3-8300, i3-8300T, i3-8350K Intel® Pentium® Gold G5400, G5400T, G5400T, G5420, G5420T, G5420T, G5500, G5500T, G5600 Intel® Celeron® Processor G4900, G4900T, G4920	Desktop	906EB	02	Yes
Coffee Lake S (4+2) Xeon E	Intel® Xeon® Processor E Family	Intel® Xeon® Processor E-2174G, E-2144G, E-2134, E-2124, E-2124G, E-2284G, E-2274G, E-2254ML, E-2254ME, E-2244G, E-2234, E-2224, E-2224G, E-2184G	Workstation/ AMT Server/ Server	906EA	22	Yes

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)

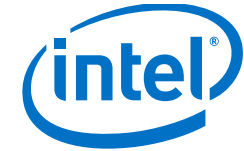


Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
Coffee Lake S (6+2) x/KBP	8 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-8700K Intel® Core™ Processor i5-8600K, i5-8650K	Desktop	906EA	22	Yes
Coffee Lake H (8+2)	9 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i9-9980HK, i9-9880H	Desktop	906ED	22	Yes
Kaby Lake G	8 <sup>th</sup> Generation Intel® Core™ Processor Family  Intel® Pentium® Processor Family	Intel® Core™ Processor i7-8705G, i7-8706G, i7-8709G, i7-8809G Intel® Core™ Processor i5-8305G	Mobile	906E9	2A	Yes
Kaby Lake H	7 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-7700HQ, i7-7820EQ, i7-7820HK, i7-7820HQ, i7-7920HQ Intel® Core™ Processor i5-7300HQ, i5-7440EQ, i5-7440HQ, i5-7442EQ Intel® Core™ i3-7100H	Mobile  Embedded	906E9	2A	Yes
Kaby Lake Refresh U 4+2	8 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-8550U, i7-8650U Intel® Core™ Processor i5-8250U, i5-8350U Intel® Core™ Processor i3-7020U, i3-8130U	Mobile	806EA	C0	Yes
Kaby Lake S	7 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-7700, i7-7700K, i7-7700T Intel® Core™ Processor i5-7400, i5-7400T, i5-7500, i5-7500T, i5-7600, i5-7600K, i5-7600T Intel® Core™ Processor i3-7100E, i3-7101E, i3-7101TE, i3-7102E, i3-7120, i3-7120T, i3-7320T, i3-7340 Intel® Celeron® Processor G3930E, G3930TE	Desktop  Embedded	906E9	2A	Yes
Kaby Lake U	7 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-7500U, i7-7510U, i7-7600U Intel® Core™ Processor i5-7200U, i5-7210U, i5-7300U, i5-7500U Intel® Core™ Processor i3-7007U, i3-7100U, i3-7110U, i3-7130U,	Mobile	806E9	C0	Yes

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)

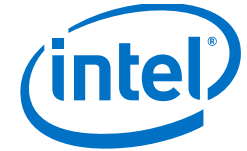


Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
		Intel® Pentium® Processor 4415U Intel® Celeron® Processor 3865U, 3965U				
Kaby Lake U23e	7 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-7560U, i7-7567U, i7-7660U, Intel® Core™ Processor i5-7260U, i5-7267U, i5-7287U, i5-7360U Intel® Core™ Processor i3-7167U	Mobile	806E9	C0	Yes
Kaby Lake X	Intel® Core™ X-series Processors	Intel® Core™ Processor i7-7740X Intel® Core™ Processor i5-7640X	Desktop	906E9	2A	Yes
Kaby Lake Xeon E3	Intel® Xeon® Processor E3 v6 Family	Intel® Xeon® Processor v6 E3-1535M, E3-1505M, E3-1505L, E3-1501L, E3-1501M, E3-1285, E3-1280, E3-1275, E3-1270, E3-1245, E3-1240, E3-1230, E3-1225, E3-1220	Server, Workstation Embedded	906E9	2A	Yes
Kaby Lake Y	7 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-7Y75 Intel® Core™ Processor i5-7Y54, i5-7Y57 Intel® Core™ Processor M3-7Y30, M3-7Y30 Intel® Pentium® Processor 4410Y, 4415Y Intel® Celeron® Processor 3965Y	Mobile	806E9	C0	Yes
Skylake H	6 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-6700HQ, i7-6770HQ, i7-6820HK, i7-6820HQ, i7-6870HQ, i7-6920HQ, i7-6970HQ Intel® Core™ Processor i5-6300HQ, i5-6350HQ, i5-6440HQ Intel® Core™ Processor i3-6100H	Mobile	506E3	36	Yes
Skylake S	6 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor i7-6700, i7-6700K, i7-6700T, i7-6700TE, i7-6820EQ, i7-6822EQ Intel® Core™ Processor i5-6400, i5-6400T, i5-6440EQ, i5-6442EQ, i5-6500, i5-6500T, i5-6500TE, i5-6600, i5-6600K, i5-6600T Intel® Core™ Processor i3-6100, i3-6100E, i3-6100T, i3-6100TE, i3-6102E, i3-6120, i3-6120T, i3-6300, i3-6300T, i3-6320, i3-6320T Intel® Pentium® Processor G4400, G4400T, G4400TE, G4420, G4420T, G4500, G4500T, G4520, G4520T, G4540	Desktop Embedded	506E3	36	Yes

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)

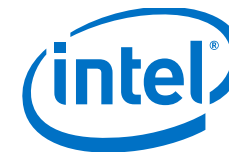


Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
		Intel® Celeron® Processor G3900, G3900T, G3900TE, G3902E, G3920, G3920T, G3940				
Skylake U	6 <sup>th</sup> Generation Intel® Core™ Processors	Intel® Core™ Processor i7-6500U, i7-6510U, i7-6600U Intel® Core™ Processor i5-6200U, i5-6210U, i5-6300U, i5-6310U Intel® Core™ Processor i3-6100U, i3-6110U Intel® Pentium® Processor 4405U, 4415U Intel® Celeron® Processor 3855U, 3865U, 3955U, 3965U	Mobile	406E3	C0	Yes
Skylake U23e	6 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor I7-6560U, I7-6567U, I7-6650U, I7-6660U Intel® Core™ Processor I5-6260U, I5-6267U, I5-6287U, I5-6360U Intel® Core™ Processor I3-6167U	Mobile	406E3	C0	Yes
Skylake W	Intel® Xeon® Processor W Family	Intel® Xeon® Processor W-2123, W-2125, W-2133, W-2135, W-2145, W-2155, W-2195, W-2175	Workstation	50654	B7	Yes
Skylake X	Intel® Core™ X-series Processors	Intel® Core™ Extreme Edition Processor i9-7980XE Intel® Core™ X-series Processor i9-7900X, i9-7920X, i9-7940X, i9-7960X Intel® Core™ X-series Processor i7-7800X, i7-7820X	Desktop	50654	B7	Yes
Skylake Y	6 <sup>th</sup> Generation Intel® Core™ Processor Family	Intel® Core™ Processor m7-6Y75 Intel® Core™ Processor m5-6Y54, m5-6Y57 Intel® Core™ Processor m3-6Y30 Intel® Pentium® Processor 4405Y	Mobile	406E3	C0	Yes
Skylake Server	Intel® Xeon® Scalable Processors	Intel® Xeon® Platinum Processor 8153, 8156, 8158, 8160, 8160F, 8160M, 8160T, 8164, 8168, 8170, 8170M, 8176, 8176F, 8176M, 8180, 8180M  Intel® Xeon® Gold Processor 5115, 5118, 5119T, 5120, 5120T, 5122, 6126, 6126F, 6126T, 6128, 6130, 6130F, 6130T, 6132, 6134, 6134M, 6136, 6138, 6138F, 6138T, 6140, 6140M, 6142, 6142F, 6142M, 6144, 6146, 6148, 6148F, 6150, 6152, 6154	Server	50654	B7	Yes

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)

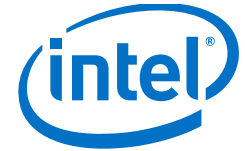


Code Name	Product Collection	Product Names	Vertical Segment	CPUID	Platform ID	OS Update Capable
		Intel® Xeon® Silver Processor 4108, 4109T, 4110, 4112, 4114, 4114T, 4116, 4116T Intel® Xeon® Bronze Processor 3104, 3106				
Whiskey Lake U	8 <sup>th</sup> Generation Intel® Core™ Processors	Intel® Core™ Processor i7-8565U Intel® Core™ Processor i5-8265U Intel® Core™ Processor i3-8145U Intel® Core™ Processor 4205U, 5405U	Mobile	806EB	D0	Yes
Whiskey Lake U	8 <sup>th</sup> Generation Intel® Core™ Processors	Intel® Core™ Processor i7-8565U, i7-8665U Intel® Core™ Processor i5-8365U, i5-8265U	Mobile	806EC	94	Yes

# Microcode Update Guidance

Intel Product Security Incident Response Team (PSIRT)

[secure@intel.com](mailto:secure@intel.com)



## Legal Notices and Disclaimers

INFORMATION IN THIS DOCUMENT IS PROVIDED AS IS. Intel may make changes to specifications and product descriptions at any time, without notice.

All products, dates, and figures specified are preliminary based on current expectations, and are subject to change without notice.

Intel, processors, chipsets, and desktop boards may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No product or component can be absolutely secure. Check with your system manufacturer or retailer or learn more at <http://intel.com>.

Some results have been estimated or simulated using internal Intel analysis or architecture simulation or modeling, and provided to you for informational purposes. Any differences in your system hardware, software or configuration may affect your actual performance.

Intel and the Intel logo are trademarks of Intel Corporation in the United States and other countries.

Copyright © Intel Corporation 2019