



MICROCODE REVISION GUIDANCE

APRIL 2 2018

MCU RECOMMENDATIONS

The following table provides details of availability for microcode updates currently planned by Intel. Changes since the previous version are highlighted in yellow.

LEGEND:

Production Status:

- Planning – Intel has not yet determined a schedule for this MCU.
- Pre-beta – Intel is performing early validation for this MCU.
- Beta – Intel has released this production signed MCU under NDA for all customers to validate.
- Production – Intel has completed all validation and is authorizing customers to use this MCU in a production environment.
- Stopped – After a comprehensive investigation of the microarchitectures and microcode capabilities for these products, Intel has determined to not release microcode updates for these products for one or more reasons including, but not limited to the following:
 - Micro-architectural characteristics that preclude a practical implementation of features mitigating Variant 2 (CVE-2017-5715)
 - Limited Commercially Available System Software support
 - Based on customer inputs, most of these products are implemented as “closed systems” and therefore are expected to have a lower likelihood of exposure to these vulnerabilities.

Pre-Mitigation Production MCU:

- For products that do not have a Production MCU with mitigations for Variant 2 (Spectre), Intel recommends using this version of MCU. This does not impact mitigations for Variant 1 (Spectre) and Variant 3 (Meltdown).

STOP deploying these MCU revs:

- Intel recommends to discontinue using these select versions of MCU that were previously released with mitigations for Variant 2 (Spectre) due to system stability issues.
- Lines with “****” were previously recommended to discontinue use. Subsequent testing by Intel has determined that these were unaffected by the stability issues and have been re-released without modification.

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Anniedale > Moorefield | Intel® Atom® Processor Z3530, Z3560, Z3570, Z3580, Z3590 | 506A0 | 01 | Production | --- | --- | 00000039 |
| Apollo Lake D0 | Intel® Pentium® Processor J4205, N4200 Intel® Celeron® Processor J3355, J3455, N3350, N3450 Intel® Atom® Processor x5-E3930, x5-E3940, x7-E3950 | 506C9 | 03 | Production | --- | --- | 0000002E |
| Apollo Lake E0 | Intel® Atom® Processor x5-E3930, x5-E3940, x7-E3950 | 506CA | 03 | Production | --- | --- | 00000008 |
| Arrandale | Intel® Core™ Processor i7-i7-620M/LM/UM, i7-640LM/UM Intel® Core™ Processor i5-430M, i5-520M/UM, i5-540M Intel® Core™ Processor 330M, 350M Intel® Celeron® Processor P4500, P4505 | 20652 | 12 | Production | --- | --- | 0x10 |
| Arrandale | Intel® Core™ Processor i7-610E, 620LE/LM/M/UE/UM, 640LM/M/UM, 660LM/UE/UM, 680UM Intel® Core™ Processor i5-430M/UM, 450M, 460M, 470UM, 480M, 520E/M/UM, 540M/UM, 560M/UM, 580M Intel® Core™ Processor i3-330E/M/UM, 350M, 370M, 380M/UM, 390M Intel® Pentium® Processor P6000, P6100, P6200, P6300 Intel® Pentium® Processor U5400, U5600 Intel® Celeron® Processor P4500, P4505, P4600 Intel® Celeron® Processor U3400, U3405, U3600 | 20655 | 92 | Production | --- | --- | 0x6 |
| Avoton/Rangeley | Intel® Atom® Processor C2000 Product Family | 406D8 | 01 | Production | --- | --- | 0000012A |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|--------------------|--|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Bloomfield | Intel® Core™ Processor Extreme Edition i7-975 Intel® Core™ Processor i7-920, 930, 950, 960 | 106A4 | 03 | Stopped | 0x13 | --- | --- |
| Bloomfield | Intel® Core™ Processor Extreme Edition i7-965 Intel® Core™ Processor i7-920, 940 | 106A5 | 03 | Stopped | 0x1B | --- | --- |
| Bloomfield Xeon | Intel® Xeon® Processor W3520, W3530, W3540, W3550, W3565, W3570, W3580 | 106A5 | 03 | Stopped | 0x1B | --- | --- |
| Broadwell DE A1 | Intel® Xeon® Processor D-1513N, D-1523N, D-1533N, D-1543N, D1553N | 50665 | 10 | Production | --- | --- | 0xE000009 |
| Broadwell DE V1 | Intel® Xeon® Processor D-1520, D-1540 | 50662 | 10 | Production | --- | --- | 0x15 |
| Broadwell DE V2,V3 | Intel® Xeon® Processor D-1518, D-1519, D-1521, D-1527, D-1528, D-1531, D-1533, D-1537, D-1541, D-1548 Intel® Pentium® Processor D1507, D1508, D1509, D1517, D1519 | 50663 | 10 | Production | --- | --- | 0x7000012 |
| Broadwell DE Y0 | Intel® Xeon® Processor D-1557, D-1559, D-1567, D-1571, D-1577, D-1581, D-1587 | 50664 | 10 | Production | --- | --- | 0xF000011 |
| Broadwell E | Intel® Core™ Processor Extreme Edition i7-6950K Intel® Core™ Processor i7-6800K, i7-6850, i7-6900K | 406F1 | EF | Production | --- | --- | 0xB00002A |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|------------------------------|--|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Broadwell H 43e | Intel® Core™ Processor i7-5950HQ, i7-5850HQ, i7-5750HQ, i7-5700HQ Intel® Core™ Processor i5-5575R, i5-5675C, i5-5675R, i7-5775C, i7-5775R Intel® Core™ Processor i7-5700EQ, i7-5850EQ | 40671 | 22 | Production | --- | --- | 0x1D |
| Broadwell Server E, EP, EP4S | Intel® Xeon® Processor E5-2603V4, E5-2609V4, E5-2620V4, E5-2623V4, E5-2630LV4, E5-2630V4, E5-2637V4, E5-2640V4, E5-2643V4, E5-2650LV4, E5-2650V4, E5-2660V4, E5-2667V4, E5-2679V4, E5-2680V4, E5-2683V4, E5-2690V4, E5-2695V4, E5-2697AV4, E5-2697V4, E5-2698V4, E5-2699AV4, E5-2699V4 Intel® Xeon® Processor E5-2608LV4, E5-2618LV4, E5-2628LV4, E5-2648LV4, E5-2658V4, E5-2699RV4, E5-4628LV4 | 406F1 | EF | Production | --- | --- | 0xB00002A |
| Broadwell Server EX | Intel® Xeon® Processor E7-4809V4, E7-4820V4, E7-4830V4, E7-4850V4, E7-8855V4, E7-8860V4, E7-8867V4, E7-8870V4, E7-8880V4, E7-8890V4, E7-8891V4, E7-8893V4, E7-8894V4 | 406F1 | EF | Production | --- | --- | 0xB00002A |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|--------------------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Broadwell U/Y | Intel® Core™ Processor i7-5650U,i7-5600U, i7-5557U, i7-5550U, i7-5500U Intel® Core™ Processor i5-5350U, i5-5350,i5-5300U, i5-5287U,i5-5257U, i5-5250U, i5-5200U Intel® Core™ Processor i3-5157U, i3-5020U, i3-5015U, i3-5010U, i3-5006U, i3-5005U, i3-5010U, i5-5350U, i7-5650U Intel® Core™ Processor M-5Y71, M-5Y70, M-5Y51, M-5Y3, M-5Y10c, M -5Y10a, M-5Y10 Intel® Pentium® Processor 3805U, 3825U, 3765U, 3755U, 3215U, 3205U Intel® Celeron® 3765U | 306D4 | C0 | Production | --- | --- | 0x2A |
| Broadwell Xeon E3 | Intel® Xeon® Processor v4 E3-1258L, E3-1265L, E3-1278L, E3-1285, E3-1285 | 40671 | 22 | Production | --- | --- | 0x1D |
| Broxton | Intel® Atom® Scalable Platform | 506C2 | 01 | Production | --- | --- | 00000010 |
| Cherry View (Cherry Trail, Braswell) | Intel® Atom® x5-Zxxxx CPU | 406C3 | 01 | Production | --- | --- | 00000367 |
| Cherry View (Cherry Trail, Braswell) | Intel® Celeron® Processor Jxxxx, Intel® Celeron® Processor N3xxx, Intel® Pentium® Processor J3xxx, Intel® Pentium® Processor N3xxx, Intel® Atom® x5-E8000 Processor | 406C4 | 01 | Production | --- | --- | 00000410 |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|---|--|-------|-------------|----------------------|-------------------------------|-------------------------------|------------------------|
| Clarkdale | Intel® Core™ Processor i5-650, 660, 661, 670 Intel® Core™ Processor i3-530, 540, 550, 560 Intel® Pentium® Processor G6950 | 20652 | 12 | Production | --- | --- | 0x10 |
| Clarkdale | Intel® Core™ Processor i5-650, 655K, 660, 661, 670, 680 Intel® Core™ Processor i3-530, 540 Intel® Pentium® Processor G6950, G6951, G6960 | 20655 | 92 | Production | --- | --- | 0x6 |
| Clarkdale Xeon | Intel® Xeon® Processor L3406 | 20652 | 12 | Production | --- | --- | 0x10 |
| Clarksfield | Intel® Core™ Extreme Processor i7-920XM, 940XM Intel® Core™ Processor i7-720QM, 740QM, 820QM, 840QM | 106E5 | 13 | Stopped | 0x08 | --- | --- |
| Coffee Lake H (6+2), Coffee Lake S (6+2) | 8th Generation Intel® Core™ Processor Family | 906EA | 22 | Production | --- | --- | 0x84 |
| Coffee Lake S (6+2) Xeon E | 8th Generation Intel® Core™ Processor Family | 906EA | 22 | Production Candidate | --- | --- | 0x84 |
| Coffee Lake U43e | 8th Generation Intel® Core™ Processor Family | 806EA | C0 | Production Candidate | --- | --- | 0x84 |
| Coffee Lake-S (4+2) | 8th Generation Intel® Core™ Desktop Processor Family | 906EB | 02 | Production | --- | --- | 0x84 |
| Coffee Lake-S (4+2) Xeon E | 8th Generation Intel® Core™ Processor Family | 906EA | 22 | Production | --- | --- | 0x84 |
| Coffee Lake-S (6+2) x/KBP | 8th Generation Intel® Core™ Processor Family | 906EA | 22 | Production | --- | --- | 0x84 |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|-----------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Cougar Mountain (AMT) | Intel® Puma™ 7 Home Gateway | 606E1 | 01 | Production | --- | --- | 0x106 |
| Denverton (GLM) | Intel® Atom® Processor C3000 Product Family | 506F1 | 01 | Production | --- | --- | 00000020 |
| Gemini Lake | Intel® Pentium® Silver processors N5xxx, J5xxx, Intel® Celeron® processors N4xxx, J4xxx | 706A1 | 01 | Production | --- | --- | 00000022 |
| Gladden | Intel® Core™ Processor i3-2115C, i3-3115C Intel® Pentium® Processor B915C, B925C Intel® Celeron® Processor 725C Intel® Xeon® Processor E3-1105C, E3-1125C, E3-1105C v2, E3-1125C v2 | 306A9 | --- | Production | --- | --- | 0x1F |
| Gulftown | Intel® Core™ i7-970, 980 Intel® Core™ Processor Extreme Edition i7-980X, 990X Intel® Xeon® Processor W3690 | 206C2 | 03 | Stopped | 0x1E | --- | --- |
| Harpertown Xeon C0 | Intel® Xeon® Processor L5408, L5410, L5420 Intel® Xeon® Processor E5405, E5410, E5420, E5430, E5440, E5450, E5462, E5472 Intel® Xeon® Processor X5450, X5460, X5470, X5472, X5482 | 10676 | 40 | Stopped | 0x612 | --- | --- |
| Harpertown Xeon E0 | Intel® Xeon® Processor L5408, L5410, L5420, L5430 Intel® Xeon® Processor E5405, E5410, E5420, E5430, E5440, E5450, E5462, E5472 Intel® Xeon® Processor X5450, X5460, X5470, X5492 | 1067A | 44 | Stopped | 0xA0E | --- | --- |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|----------------------------|--|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Haswell (including H, S) | 4th Generation Intel® Core™ Mobile Processor Family, Intel® Pentium® Mobile Processor Family, Intel® Celeron® Mobile Processor Family | 306C3 | 32 | Production | --- | --- | 0x24 |
| Haswell Perf Halo | Intel® Core™ Extreme Processor (5960x, 5930x, 5820x) | 40661 | 32 | Production | --- | --- | 0x19 |
| Haswell Server E, EP, EP4S | Intel® Xeon® Processor v3 E5-1428L, E5-1603, E5-1607, E5-1620, E5-1630, E5-1650, E5-1660, E5-1680, E5-2408L, E5-2418L, E5-2428L, E5-2438L, E5-2603, E5-2608L, E5-2608L, E5-2609, E5-2618L, E5-2620, E5-2623, E5-2628L, E5-2630, E5-2630L, E5-2637, E5-2640, E5-2643, E5-2648L, E5-2650, E5-2650L, E5-2658, E5-2660, E5-2667, E5-2670, E5-2680, E5-2683, E5-2685, E5-2687W, E5-2690, E5-2695, E5-2697, E5-2698, E5-2699, E5-4610, E5-4620, E5-4627, E5-4640, E5-4648, E5-4650, E5-4655, E5-4660, E5-4667, E5-4669 | 306F2 | 6F | Production | --- | --- | 0x3C |
| Haswell Server EX | Intel® Xeon® Processor E7-4809V3, E7-4820V3, E7-4830V3, E7-4850V3, E7-8860V3, E7-8867V3, E7-8870V3, E7-8880LV3, E7-8880V3, E7-8890V3, E7-8891V3, E7-8893V3 | 306F4 | 80 | Production | --- | --- | 0x11 |
| Haswell ULT | 4th Generation Intel® Core™ Mobile Processor Family, Intel® Pentium® Mobile Processor Family, Intel® Celeron® Mobile Processor Family | 40651 | 72 | Production | --- | --- | 0x23 |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|-----------------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Haswell Xeon E3 | Intel® Xeon® Processor E3-1220V3, E3-1225V3, E3-1230LV3, E3-1230V3, E3-1240V3, E3-1245V3, E3-1270V3, E3-1275LV3, E3-1275V3, E3-1280V3, E3-1285LV3, E3-1285V3 | 306C3 | 32 | Production | --- | --- | 0x24 |
| Ivy Bridge | 3rd Generation Intel® Core™ Mobile Processor Family, Intel® Pentium® Mobile Processor Family, and Intel® Celeron® Mobile Processor Family | 306A9 | 12 | Production | --- | --- | 0x1F |
| Ivy Bridge Server E, EN, EP, EP4S | Intel® Xeon® Processor v2 E5-1428L, E5-1620, E5-1650, E5-1660, E5-2403, E5-2407, E5-2418L, E5-2420, E5-2428L, E5-2430, E5-2430L, E5-2440, E5-2448L, E5-2450, E5-2450L, E5-2470, E5-2603, E5-2609, E5-2618L, E5-2620, E5-2628L, E5-2630, E5-2630L, E5-2637, E5-2640, E5-2643, E5-2648L, E5-2650, E5-2650L, E5-2658, E5-2660, E5-2667, E5-2670, E5-2680, E5-2687W, E5-2690, E5-2695, E5-2697, E5-4603, E5-4607, E5-4610, E5-4620, E5-4624L, E5-4627, E5-4640, E5-4650, E5-4657L | 306E4 | ED | Production | --- | --- | 0x42C |
| Ivy Bridge Server EX | E5-4610, E5-4620, E5-4624L, E5-4627, E5-4640, E5-4650, E5-4657L | 306E7 | ED | Production | --- | --- | 0x713 |
| Ivy Bridge Xeon E3 | Intel® Core™ Processor Extreme Edition i7-4960X Intel® Core™ Processor i7-4820K, i7-4930K | 306A9 | 12 | Production | --- | --- | 0x1F |
| Ivy Bridge E | Intel® Core™ Processor Extreme Edition i7-4960X Intel® Core™ Processor i7-4820K, i7-4930K | 306E4 | ED | Production | --- | --- | 0x42C |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|-------------------------|--|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Jasper Forest | Intel® Celeron® Processor P1053 Intel® Xeon® Processor EC3528, EC3529, EC5509, EC5539, EC5549, LC3518, LC3528, LC5518, LC5528 | 106E4 | 09 | Stopped | 0x4 | --- | --- |
| Kaby Lake H/S/X/G | 7th Generation Intel® Core™ Processor Family | 906E9 | 2A | Production | --- | --- | 0x84 |
| Kaby Lake Refresh U 4+2 | 8th Generation Intel® Core™ Mobile Processor Family | 806EA | C0 | Production | --- | --- | 0x84 |
| Kaby Lake U/Y, U23e | 7th Generation Intel® Core™ Mobile Processors | 806E9 | C0 | Production | --- | --- | 0x84 |
| Kaby Lake Xeon E3 | Intel® Xeon® Processor v6 E3-1220, E3-1225, E3-1230, E3-1240, E3-1245, E3-1270, E3-1275, E3-1280 | 906E9 | 2A | Production | --- | --- | 0x84 |
| Knights Landing | Intel® Xeon® Phi™ Processor 72xx | 50671 | 78 | Production | --- | --- | 0x1B6 |
| Knights Mill | Intel® Xeon® Phi™ Processor Family | 80650 | 08 | Production | --- | --- | 0x18 |
| Lynnfield | Intel® Core™ Processor i7-860, 860S, 870, 870S, 875K, 880 Intel® Core™ Processor i5-750, 750S, 760 | 106E5 | 13 | Production | --- | --- | 0x09 |
| Lynnfield Xeon | Intel® Xeon® Processor L3426 Intel® Xeon® Processor X3430, X3440, X3450, X3460, X3470, X3480 | 106E5 | 13 | Production | --- | --- | 0x09 |
| Nehalem EP, Nehalem WS | Intel® Xeon® Processor E5502, E5503, E5504, E5506, E5507, E5520, E5530, E5540 Intel® Xeon® Processor L5506, L5508, L5518, L5520, L5530 Intel® Xeon® Processor W5580, W5590 Intel® Xeon® Processor X5550, X5560, X5570 | 106A5 | 03 | Production | --- | --- | 0x1C |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|---------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Nehalem EX | Intel® Xeon® Processor E6510, E6540, E7520, E7530, E7540, L7545, L7555, X6550, X7542, X7550, X7560 | 206E6 | 04 | Production | --- | --- | 0x0C |
| Penryn/QC | Intel® Core™2 Extreme Processor X9000, X9100 Intel® Core™2 Quad Processor Q9000, Q9100 Intel® Core™2 Duo Processor T6400, T6500, T6670, T8100, T8300, T9300, T9400, T9500, T9550, T9600, T9800, T9900, SU9300, SU9400, SU9600, SP9300, SP9400, SP9600, SL9380, SL9400, SL9600, SL9300, P7350, P7370, P7450, P7550, P7570, P8400, P8600, P8700, P8800, P9500, P9600, P9700 Intel® Core™2 Solo Processor SU3500, ULV SU3500, ULV SU3300 Intel® Pentium® Processor T4200, T4300, T4400, T4500 Intel® Celeron® Processor 900, 925, SU2300, T3100, T3300, T3500, ULV 763 Intel® Celeron® M Processor ULV 722, ULV 723, ULV 743 | 1067A | B1 | Stopped | 0xA0E | --- | --- |
| Sandy Bridge | Intel® Core™ i3-21xx/23xx-T/M/E/UE Processor, Intel® Core™ i5-23xx/24xx/25xx-T/S/M/K Processor, Intel® Core™ i7-2xxx-S/K/M/QM/LE/UE/QE Processor, Intel® Core™ i7-29xxXM Extreme Processor, Intel® Celeron® Desktop G4xx, G5xx Processor, Intel® Celeron® Mobile 8xx, B8xx Processor, Intel® Pentium® Desktop 350, G6xx, G6xxT, G8xx Processor, Intel® Pentium® Mobile 9xx, B9xx Processor | 206A7 | 12 | Production | --- | --- | 0x2D |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|--------------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Sandy Bridge Server EN/EP/EP4S | Intel® Xeon® Processor E5-2620, E5-2630, E5-2630L, E5-2640, E5-2650, E5-2650L, E5-2660, E5-2667, E5-2670, E5-2680, E5-2690 | 206D6 | 6D | Production | --- | --- | 0x61C |
| Sandy Bridge Server EN/EP/EP4S | Intel® Xeon® Processor E5-1428L, E5-1620, E5-1650, E5-1660, E5-2403, E5-2407, E5-2418L, E5-2420, E5-2428L, E5-2430, E5-2430L, E5-2440, E5-2448L, E5-2450, E5-2450L, E5-2470, E5-2603, E5-2609, E5-2620, E5-2630, E5-2630L, E5-2637, E5-2640, E5-2643, E5-2648L, E5-2650, E5-2650L, E5-2658, E5-2660, E5-2665, E5-2667, E5-2670, E5-2680, E5-2687W, E5-2690, E5-4603, E5-4607, E5-4610, E5-4617, E5-4620, E5-4640, E5-4650, E5-4650L Intel® Pentium® Processor 1405 | 206D7 | 6D | Production | --- | --- | 0x713 |
| Sandy Bridge Xeon E3 | Intel® Xeon® Processor E3-1200 Product Family | 206A7 | 12 | Production | --- | --- | 0x2D |
| Skylake D, Bakerville | Intel® Xeon® Processor D-2123IT, D-2141I, D-2142IT, D-2143IT, D-2145NT, D-2146NT, D-2161I, D-2163IT, D-2166NT, D-2173IT, D-2177NT, D-2183IT, D-2187NT | 50654 | B7 | Production | --- | --- | 0x2000043 |
| Skylake H/S | 6th Generation Intel® Core™ Processor Family | 506E3 | 36 | Production | --- | ---*** | 0xC2*** |

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| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|------------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Skylake Server | Intel® Xeon® Bronze Processor 3104, 3106 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 Intel® Xeon® Platinum Processor 8153, 8156, 8158, 8160, 8160F, 8160M, 8160T, 8164, 8168, 8170, 8170M, 8176, 8176F, 8176M, 8180, 8180M Intel® Xeon® Silver Processor 4108, 4109T, 4110, 4112, 4114, 4114T, 4116, 4116T | 50654 | B7 | Production | --- | --- | 0x2000043 |
| Skylake U/Y | 6th Generation Intel® Core™ m Processors | 406E3 | C0 | Production | --- | ---*** | 0xC2*** |
| Skylake U23e | 6th Generation Intel® Core™ m Processors | 406E3 | C0 | Production | --- | ---*** | 0xC2*** |
| Skylake W | Intel® Xeon® Processor W-2123, W-2125, W-2133, W-2135, W-2145, W-2155, W-2195, W-2175 | 50654 | B7 | Production | --- | --- | 0x2000043 |
| Skylake X, Basin Falls | Intel® Core™ i9 79xxX, 78xxX | 50654 | B7 | Production | --- | --- | 0x2000043 |
| Skylake Xeon E3 | Intel® Xeon® Processor v5 E3-1220, E3-1225, E3-1230, E3-1235L, E3-1240, E3-1240L, E3-1245, E3-1260L, E3-1270, E3-1275, E3-1280 | 506E3 | 36 | Production | --- | ---*** | 0xC2*** |
| SoFIA 3G ES2.1 and Granite 4 | Intel® Atom® x3-C3130 Processor | 506D1 | 02 | Production | --- | --- | 00000103 |

MICROCODE UPDATE GUIDANCE

| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|--|---|-------|------------------------------|-------------------|-------------------------------|-------------------------------|------------------------|
| SoFIA 3GR | Intel® Atom® Processor x3-C3200RK, x3-C3230RK | 506D1 | 02 | Stopped | --- | --- | --- |
| Tangier (SLM) | Intel® Atom® Processor Z34XX | 406A8 | 01 | Production | --- | --- | 00000833 |
| Tangier (SLM) | Intel® Atom® Processor Z34XX | 406A9 | 01 | Production | --- | --- | 00000833 |
| Valleyview, Bay Trail I (B2, B3 step) | Intel® Atom® Processor E3800 Product Family | 30673 | 01 | Production | --- | --- | 0000326 |
| Valleyview, Bay Trail I (D0, D1 step) Valleyview, Bay Trail M/D (D1 step) | Intel® Atom® Processor E3800 Product Family, Intel® Celeron® Processor N2807, N2930, Intel® Pentium® Processor J1800, J1900 | 30679 | 0F (Was 01 for D0-only MCUs) | Production | --- | --- | 0000090A |
| Valleyview, Bay Trail M/D (B2, B3 step) | Intel® Celeron® Processor Jxxxx & Nxxxx, Intel® Pentium® Processor Jxxxx & Nxxxx | 30673 | 0C | Production | --- | --- | 0000326 |
| Valleyview, Bay Trail M/D (C0 step) | Intel® Celeron® Processor Jxxxx & Nxxxx Intel® Pentium® Processor Jxxxx & Nxxxx | 30678 | 0C | Production | --- | --- | 00000836 |
| Valleyview, Bay Trail T (B2, B3 step) | Intel® Atom® Processor Z3600 & Z3700 Series | 30673 | 02 | Production | --- | --- | 0000326 |
| Valleyview, Bay Trail T (C0 step) | Intel® Atom® Processor Z3600 & Z3700 Series | 30678 | 02 | Production | --- | --- | 00000836 |

MICROCODE UPDATE GUIDANCE

| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|------------------------|---|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| Westmere EP, WS | Intel® Xeon® Processor E5603, E5606, E5607, E5620, E5630, E5640, E5645, E5649 Intel® Xeon® Processor L5609, L5618, L5630, L5638, L5640 Intel® Xeon® Processor W3670, W3680 Intel® Xeon® Processor X5647, X5650, X5660, X5667, X5670, X5672, X5675, X5677, X5680, X5687, X5690, X5698 | 206C2 | 03 | Production | --- | --- | 0x1E |
| Westmere EX (EGL, WSM) | Intel® Xeon® Processor E7-2803, 2820, 2830, 2850, 2860, 2870, 4807, 4820, 4830, 4850, 4860, 4870, 8830, 8837, 8850, 8860, 8867L, 8870 | 206F2 | 05 | Production | --- | --- | 0x3A |
| Wolfdale C0, M0 | Intel® Core™ 2 Duo Processor E7200, E7300, E8190, E8200, E8300, E8400, E8500 | 10676 | 91 | Stopped | 0x612 | --- | --- |
| Wolfdale E0, R0 | Intel® Core™ 2 Duo Processor E7400, E7500, E8400, E8500, E8600 Intel® Pentium® Processor E5200, E5300, E5400, E5500, E5700, E5800, E6300, E6500, E6500K, E6600, E6700, E6800 Intel® Celeron® Processor E3200, E3300, E3400, E3500 | 1067A | B1 | Stopped | 0xA0E | --- | --- |
| Wolfdale Xeon C0 | Intel® Xeon® Processor E3110, E5205, E5220, L5240, X5260, X5272 | 10676 | 04 | Stopped | 0x612 | --- | --- |
| Wolfdale Xeon E0 | Intel® Xeon® Processor E3110, E3120, E5205, E5220, L3110, L5215, L5240, X5260, X5270, X5272 | 1067A | 44 | Stopped | 0xA0E | --- | --- |

MICROCODE UPDATE GUIDANCE

| Product Names | Public Name | CPUID | Platform ID | Production Status | Pre-Mitigation Production MCU | STOP deploying these MCU revs | New Production MCU Rev |
|----------------|--|-------|-------------|-------------------|-------------------------------|-------------------------------|------------------------|
| XGold 7272 | Intel® XMM™ 7272 Modem | 60650 | 01 | Production | --- | --- | 00000015 |
| Yorkfield | Intel® Core™2 Extreme Processor QX9650, QX9770, QX9775 Intel® Core™2 Quad Processor Q8200, Q8200S, Q8400, Q8400S, Q9300, Q9400, Q9400S, Q9450, Q9500, Q9505, Q9505S, Q9550, Q9550S, Q9650 | 10677 | 10 | Stopped | 0x70D | --- | --- |
| Yorkfield Xeon | Intel® Xeon® Processor L3360, X3320, X3330, X3350, X3360, X3370, X3380 | 10677 | 10 | Stopped | 0x70D | --- | --- |

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