**Tugas 1 : Perkembangan Mikroprosesor, Flash Memory 3 tahun terakhir**

**Mata Kuliah Organisasi dan Arsitektur Komputer**

**Disusun oleh : Ragil Burhanudin Pamungkas**

**NIM : L200150080**

**Semester : 3**

**Pengertian Mikroprosesor**

Sebuah mikroprosesor (sering dituliskan: µP atau uP) adalah sebuah central processing unit (CPU) elektronik komputer yang terbuat dari transistor mini dan sirkuit lainnya di atas sebuah sirkuit terintegrasi semikonduktor.

Sebelum berkembangnya mikroprosesor, CPU elektronik terbuat dari sirkuit terintegrasi TTL terpisah; sebelumnya, transistor individual; sebelumnya lagi, dari tabung vakum. Bahkan telah ada desain untuk mesin komputer sederhana atas dasar bagian mekanik seperti gear, shaft, lever, Tinkertoy, dll.

Evolusi dari mikroprosesor telah diketahui mengikuti Hukum Moore yang merupakan peningkatan performa dari tahun ke tahun. Teori ini merumuskan bahwa daya penghitungan akan berlipat ganda setiap 18 bulan, sebuah proses yang benar terjadi sejak awal 1970-an; sebuah kejutan bagi orang-orang yang berhubungan. Dari awal sebagai driver dalam kalkulator, perkembangan kekuatan telah menuju ke dominasi mikroprosesor di berbagai jenis komputer; setiap sistem dari mainframe terbesar sampai ke komputer pegang terkecil sekarang menggunakan mikroprosesor sebagai pusatnya.

**Perkembangan Microprocessor sejak tahun 2014 hingga 2016**

1. pada tahun 2014
2. Intel Core i5 Generasi ke 4, yaitu :

* Intel® Core™ i5-4460 Processor (6M Cache, up to 3.40 GHz)
* Intel® Core™ i5-4460S Processor (6M Cache, up to 3.40 GHz)
* Intel® Core™ i5-4460T Processor (6M Cache, up to 2.70 GHz)
* Intel® Core™ i5-4590T Processor (6M Cache, up to 3.00 GHz)
* Intel® Core™ i5-4590S Processor (6M Cache, up to 3.70 GHz)
* Intel® Core™ i5-4590 Processor (6M Cache, up to 3.70 GHz)
* Intel® Core™ i5-4690T Processor (6M Cache, up to 3.50 GHz)
* Intel® Core™ i5-4690S Processor (6M Cache, up to 3.90 GHz)
* Intel® Core™ i5-4690K Processor (6M Cache, up to 3.90 GHz)
* Intel® Core™ i5-4690 Processor (6M Cache, up to 3.90 GHz)

1. Intel Core i7 Generasi ke 4, yaitu :

* Intel® Core™ i7-4790T Processor (8M Cache, up to 3.90 GHz)
* Intel® Core™ i7-4790S Processor (8M Cache, up to 4.00 GHz)
* Intel® Core™ i7-4790K Processor (8M Cache, up to 4.40 GHz)
* Intel® Core™ i7-4790 Processor (8M Cache, up to 4.00 GHz)
* Intel® Core™ i7-4785T Processor (8M Cache, up to 3.20 GHz)

1. Pada tahun 2015
2. Intel core i5 processor generasi ke 6, yaitu :

* Intel® Core™ i5-6400T Processor (6M Cache, up to 2.80 GHz)
* Intel® Core™ i5-6400 Processor (6M Cache, up to 3.30 GHz)
* Intel® Core™ i5-6402P Processor (6M Cache, up to 3.40 GHz)
* Intel® Core™ i5-6500T Processor (6M Cache, up to 3.10 GHz)
* Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz)
* Intel® Core™ i5-6600T Processor (6M Cache, up to 3.50 GHz)
* Intel® Core™ i5-6600K Processor (6M Cache, up to 3.90 GHz)
* Intel® Core™ i5-6600 Processor (6M Cache, up to 3.90 GHz)

1. Intel Core i7 Processor generasi ke 6, yaitu :

* Intel® Core™ i7-6700 Processor (8M Cache, up to 4.00 GHz)
* Intel® Core™ i7-6700T Processor (8M Cache, up to 3.60 GHz)
* Intel® Core™ i7-6700K Processor (8M Cache, up to 4.20 GHz)

1. Pada tahun 2016
2. Intel Core i7 Generasi ke 6, yaitu :

* Intel® Core™ i7-6785R Processor (8M Cache, up to 3.90 GHz)
* Intel® Core™ i5-6585R Processor (6M Cache, up to 3.60 GHz)

1. Intel Core i5 Generasi ke 6, yaitu :

* Intel® Core™ i5-6685R Processor (6M Cache, up to 3.80 GHz)

**Tahun 2014**

|  |
| --- |
|  |
| Nama Produk | [Intel® Core™ i5-4460 Processor (6M Cache, up to 3.40 GHz)](http://ark.intel.com/id/products/80817/Intel-Core-i5-4460-Processor-6M-Cache-up-to-3_40-GHz) | [Intel® Core™ i5-4460S Processor (6M Cache, up to 3.40 GHz)](http://ark.intel.com/id/products/80818/Intel-Core-i5-4460S-Processor-6M-Cache-up-to-3_40-GHz) | [Intel® Core™ i5-4460T Processor (6M Cache, up to 2.70 GHz)](http://ark.intel.com/id/products/78927/Intel-Core-i5-4460T-Processor-6M-Cache-up-to-2_70-GHz) | [Intel® Core™ i5-4590T Processor (6M Cache, up to 3.00 GHz)](http://ark.intel.com/id/products/78928/Intel-Core-i5-4590T-Processor-6M-Cache-up-to-3_00-GHz) | [Intel® Core™ i5-4590S Processor (6M Cache, up to 3.70 GHz)](http://ark.intel.com/id/products/80816/Intel-Core-i5-4590S-Processor-6M-Cache-up-to-3_70-GHz) | [Intel® Core™ i5-4590 Processor (6M Cache, up to 3.70 GHz)](http://ark.intel.com/id/products/80815/Intel-Core-i5-4590-Processor-6M-Cache-up-to-3_70-GHz) | [Intel® Core™ i5-4690T Processor (6M Cache, up to 3.50 GHz)](http://ark.intel.com/id/products/80813/Intel-Core-i5-4690T-Processor-6M-Cache-up-to-3_50-GHz) | [Intel® Core™ i5-4690S Processor (6M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/80812/Intel-Core-i5-4690S-Processor-6M-Cache-up-to-3_90-GHz) | [Intel® Core™ i5-4690K Processor (6M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/80811/Intel-Core-i5-4690K-Processor-6M-Cache-up-to-3_90-GHz) | [Intel® Core™ i5-4690 Processor (6M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/80810/Intel-Core-i5-4690-Processor-6M-Cache-up-to-3_90-GHz) | [Intel® Core™ i7-4790T Processor (8M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/80809/Intel-Core-i7-4790T-Processor-8M-Cache-up-to-3_90-GHz) | [Intel® Core™ i7-4790S Processor (8M Cache, up to 4.00 GHz)](http://ark.intel.com/id/products/80808/Intel-Core-i7-4790S-Processor-8M-Cache-up-to-4_00-GHz) | [Intel® Core™ i7-4790K Processor (8M Cache, up to 4.40 GHz)](http://ark.intel.com/id/products/80807/Intel-Core-i7-4790K-Processor-8M-Cache-up-to-4_40-GHz) | [Intel® Core™ i7-4790 Processor (8M Cache, up to 4.00 GHz)](http://ark.intel.com/id/products/80806/Intel-Core-i7-4790-Processor-8M-Cache-up-to-4_00-GHz) | [Intel® Core™ i7-4785T Processor (8M Cache, up to 3.20 GHz)](http://ark.intel.com/id/products/80814/Intel-Core-i7-4785T-Processor-8M-Cache-up-to-3_20-GHz) |
| Nama Kode | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Devil's Canyon](http://ark.intel.com/id/products/codename/81246/Devils-Canyon) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Devil's Canyon](http://ark.intel.com/id/products/codename/81246/Devils-Canyon) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) | [Haswell](http://ark.intel.com/id/products/codename/42174/Haswell) |
| **-**  Hal Penting | | | | | | | | | | | | | | | |
| Nomor Prosesor | i5-4460 | i5-4460S | i5-4460T | i5-4590T | i5-4590S | i5-4590 | i5-4690T | i5-4690S | i5-4690K | i5-4690 | i7-4790T | i7-4790S | i7-4790K | i7-4790 | i7-4785T |
| Status | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched |
| Tanggal Peluncuran | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 | Q2'14 |
| Litografi | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm | 22 nm |
| Rekomendasi Harga Pelanggan | $182.00 - $187.00 | $182.00 | $182.00 | $192.00 | $192.00 - $202.00 | $192.00 - $202.00 | $213.00 | $213.00 - $224.00 | $242.00 - $243.00 | $213.00 - $224.00 | $303.00 | $303.00 - $312.00 | $339.00 - $350.00 | $303.00 - $312.00 | $303.00 |
| **-**  Performa | | | | | | | | | | | | | | | |
| Jumlah Inti | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Jumlah Untaian | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 8 | 8 |
| Frekuensi Dasar Prosesor | 3.20 GHz | 2.90 GHz | 1.90 GHz | 2.00 GHz | 3.00 GHz | 3.30 GHz | 2.50 GHz | 3.20 GHz | 3.50 GHz | 3.50 GHz | 2.70 GHz | 3.20 GHz | 4.00 GHz | 3.60 GHz | 2.20 GHz |
| Frekuensi Turbo Maks | 3.40 GHz | 3.40 GHz | 2.70 GHz | 3.00 GHz | 3.70 GHz | 3.70 GHz | 3.50 GHz | 3.90 GHz | 3.90 GHz | 3.90 GHz | 3.90 GHz | 4.00 GHz | 4.40 GHz | 4.00 GHz | 3.20 GHz |
| Cache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 8 MB SmartCache | 8 MB SmartCache | 8 MB SmartCache | 8 MB SmartCache | 8 MB SmartCache |
| Kecepatan Bus | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 | 5 GT/s DMI2 |
| TDP | 84 W | 65 W | 35 W | 35 W | 65 W | 84 W | 45 W | 65 W | 88 W | 84 W | 45 W | 65 W | 88 W | 84 W | 35 W |
| **-**  Informasi Tambahan | | | | | | | | | | | | | | | |
| Tersedia Opsi Terpasang | Tidak | Tidak | Tidak | Ya | Ya | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Ya | Tidak | Tidak | Tidak |
| Bebas Konflik | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Lembar Data | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/CoreTechnicalResources.html) |
| **-**  Spesifikasi Memori | | | | | | | | | | | | | | | |
| Ukuran Memori Maks (bergantung jenis memori) | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB | 32 GB |
| Jenis Memori | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V | DDR3-1333/1600, DDR3L-1333/1600 @ 1.5V |
| Jumlah Maksimum Saluran Memori | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Bandwidth Memori Maks | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s | 25,6 GB/s |
| Mendukung Memori ECC ‡ | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak |
| **-**  Spesifikasi Grafis | | | | | | | | | | | | | | | |
| Grafis Prosesor ‡ | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 | Intel® HD Graphics 4600 |
| Frekuensi Dasar Grafik | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz |
| Frekuensi Dinamis Maks Grafik | 1.10 GHz | 1.10 GHz | 1.10 GHz | 1.15 GHz | 1.15 GHz | 1.15 GHz | 1.20 GHz | 1.20 GHz | 1.20 GHz | 1.20 GHz | 1.20 GHz | 1.20 GHz | 1.25 GHz | 1.20 GHz | 1.20 GHz |
| Memori Maks Video Grafik | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB | 2 GB |
| Output Grafis | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/VGA | eDP/DP/HDMI/DVI/VGA | eDP/DP/HDMI/DVI/VGA | eDP/DP/HDMI/DVI/VGA | eDP/DP/HDMI/DVI/VGA | eDP/DP/HDMI/DVI/VGA |
| Resolusi Maksimum (HDMI 1.4)‡ | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 3840x2160@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 3840x2160@24Hz | 4096x2304@24Hz | 4096x2304@24Hz |
| Resolusi Maksimum (DP)‡ | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz |
| Resolusi Maksimum (eDP - Panel Datar Terintegrasi)‡ | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz | 3840x2160@60Hz |
| Resolusi Maksimum (VGA)‡ | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz | 1920x1200@60Hz |
| Dukungan DirectX\* | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 | 11.2/12 |
| Dukungan OpenGL\* | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| Intel® Quick Sync Video | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® InTru™ 3D Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Wireless Display | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Flexible Display Interface (Intel® FDI) | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Clear Video HD Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Jumlah Layar yang Didukung‡ | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ID Perangkat | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 | 0x412 |
| Unit Eksekusi |  |  |  |  |  |  |  |  | 20 |  |  |  | 20 |  |  |
| **-**  Opsi Ekspansi | | | | | | | | | | | | | | | |
| Kemudahan untuk Diskalakan | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only |
| Revisi PCI Express | Up to 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | 3.0 | Up to 3.0 | Up to 3.0 | Up to 3.0 | 3.0 | Up to 3.0 | Up to 3.0 |
| Konfigurasi PCI Express ‡ | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 |
| Jumlah Maksimal Jalur PCI Express | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| **-**  Spesifikasi Paket | | | | | | | | | | | | | | | |
| Soket yang Didukung | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 | FCLGA1150 |
| Konfigurasi CPU Maks | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Spesifikasi Solusi Termal | PCG 2013D | PCG 2013C | PCG 2013A | PCG 2013A | PCG 2013C | PCG 2013D | PCG 2013B | PCG 2013C | PCG 2013D | PCG 2013D | PCG 2013B | PCG 2013C | PCG 2013D | PCG 2013D | PCG 2013A |
| TCASE | 72.72°C | 71.35°C | 66.35°C | 66.35°C | 71.35°C | 72.72°C | 71.45°C | 71.35°C | 72.72°C | 72.72°C | 71.45°C | 71.35°C | 74.04°C | 72.72°C | 66.35°C |
| Ukuran Paket | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm |
| Opsi Halogen Rendah Tersedia | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS |
| **-**  Teknologi Canggih | | | | | | | | | | | | | | | |
| Intel® Turbo Boost Technology ‡ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Intel® vPro™ Technology ‡ | Tidak | Tidak | Tidak | Ya | Ya | Ya | Ya | Ya | Tidak | Ya | Ya | Ya | Tidak | Ya | Ya |
| Intel® Hyper-Threading Technology ‡ | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Ya | Ya | Ya | Ya | Ya |
| Intel® Virtualization Technology (VT-x) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® VT-x dengan Extended Page Tables (EPT) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® TSX-NI | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak |
| Intel® 64 ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Set Instruksi | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit |
| Ekstensi Set Instruksi | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 |
| Intel® My WiFi Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Keadaan Diam | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Enhanced Intel SpeedStep® Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Teknologi Pemantauan Panas | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Identity Protection Technology ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Stable Image Platform Program (SIPP) | Tidak | Tidak | Tidak | Ya | Ya | Ya | Ya | Ya | Tidak | Ya | Ya | Ya | Tidak | Ya | Ya |
| Keunggulan Intel® untuk Usaha Kecil | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |  | Ya | Ya | Ya |  | Ya | Ya |
| **-**  Intel® Data Protection Technology | | | | | | | | | | | | | | | |
| Pentunjuk Baru Intel® AES | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Kode Keamanan | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| **-**  Intel® Platform Protection Technology | | | | | | | | | | | | | | | |
| OS Guard | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Trusted Execution Technology‡ | Tidak | Tidak | Tidak | Ya | Ya | Ya | Ya | Ya | Tidak | Ya | Ya | Ya | Tidak | Ya | Ya |
| Execute Disable Bit ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Anti-Theft Technology | Ya | Ya | Ya | Ya | Ya | Ya |  |  |  |  |  |  |  |  |  |

**Tahun 2015**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Nama Produk | [Intel® Core™ i7-6700 Processor (8M Cache, up to 4.00 GHz)](http://ark.intel.com/id/products/88196/Intel-Core-i7-6700-Processor-8M-Cache-up-to-4_00-GHz) | [Intel® Core™ i7-6700T Processor (8M Cache, up to 3.60 GHz)](http://ark.intel.com/id/products/88200/Intel-Core-i7-6700T-Processor-8M-Cache-up-to-3_60-GHz) | [Intel® Core™ i7-6700K Processor (8M Cache, up to 4.20 GHz)](http://ark.intel.com/id/products/88195/Intel-Core-i7-6700K-Processor-8M-Cache-up-to-4_20-GHz) | [Intel® Core™ i5-6400T Processor (6M Cache, up to 2.80 GHz)](http://ark.intel.com/id/products/88187/Intel-Core-i5-6400T-Processor-6M-Cache-up-to-2_80-GHz) | [Intel® Core™ i5-6400 Processor (6M Cache, up to 3.30 GHz)](http://ark.intel.com/id/products/88185/Intel-Core-i5-6400-Processor-6M-Cache-up-to-3_30-GHz) | [Intel® Core™ i5-6402P Processor (6M Cache, up to 3.40 GHz)](http://ark.intel.com/id/products/93277/Intel-Core-i5-6402P-Processor-6M-Cache-up-to-3_40-GHz) | [Intel® Core™ i5-6500T Processor (6M Cache, up to 3.10 GHz)](http://ark.intel.com/id/products/88183/Intel-Core-i5-6500T-Processor-6M-Cache-up-to-3_10-GHz) | [Intel® Core™ i5-6500 Processor (6M Cache, up to 3.60 GHz)](http://ark.intel.com/id/products/88184/Intel-Core-i5-6500-Processor-6M-Cache-up-to-3_60-GHz) | [Intel® Core™ i5-6600T Processor (6M Cache, up to 3.50 GHz)](http://ark.intel.com/id/products/88189/Intel-Core-i5-6600T-Processor-6M-Cache-up-to-3_50-GHz) | [Intel® Core™ i5-6600K Processor (6M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/88191/Intel-Core-i5-6600K-Processor-6M-Cache-up-to-3_90-GHz) | [Intel® Core™ i5-6600 Processor (6M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/88188/Intel-Core-i5-6600-Processor-6M-Cache-up-to-3_90-GHz) |
| Nama Kode | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) |
| **-**  Hal Penting | | | | | | | | | | | |
| Nomor Prosesor | i7-6700 | i7-6700T | i7-6700K | i5-6400T | i5-6400 | i5-6402P | i5-6500T | i5-6500 | i5-6600T | i5-6600K | i5-6600 |
| Status | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched | Launched |
| Tanggal Peluncuran | Q3'15 | Q3'15 | Q3'15 | Q3'15 | Q3'15 | Q4'15 | Q3'15 | Q3'15 | Q3'15 | Q3'15 | Q3'15 |
| Litografi | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm | 14 nm |
| Hal yang Disertakan | Thermal Solution - E97379 | Thermal Solution - E98290 |  | Thermal Solution - E98290 | Thermal Solution - E97379 | Thermal Solution - E97379 | Thermal Solution - E98290 | Thermal Solution - E97379 | Thermal Solution - E98290 |  | Thermal Solution - E97379 |
| Rekomendasi Harga Pelanggan | $303.00 - $312.00 | $303.00 | $339.00 - $350.00 | $182.00 | $182.00 - $187.00 | $182.00 - $187.00 | $192.00 | $192.00 - $202.00 | $213.00 | $242.00 - $243.00 | $213.00 - $224.00 |
| **-**  Performa | | | | | | | | | | | |
| Jumlah Inti | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Jumlah Untaian | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Frekuensi Dasar Prosesor | 3.40 GHz | 2.80 GHz | 4.00 GHz | 2.20 GHz | 2.70 GHz | 2.80 GHz | 2.50 GHz | 3.20 GHz | 2.70 GHz | 3.50 GHz | 3.30 GHz |
| Frekuensi Turbo Maks | 4.00 GHz | 3.60 GHz | 4.20 GHz | 2.80 GHz | 3.30 GHz | 3.40 GHz | 3.10 GHz | 3.60 GHz | 3.50 GHz | 3.90 GHz | 3.90 GHz |
| Cache | 8 MB SmartCache | 8 MB SmartCache | 8 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache | 6 MB SmartCache |
| Kecepatan Bus | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 |
| TDP | 65 W | 35 W | 91 W | 35 W | 65 W | 65 W | 35 W | 65 W | 35 W | 91 W | 65 W |
| Jumlah Tautan QPI |  |  | 0 |  |  |  |  |  |  |  |  |
| **-**  Informasi Tambahan | | | | | | | | | | | |
| Tersedia Opsi Terpasang | Ya | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Ya | Tidak | Tidak | Tidak |
| Bebas Konflik | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Lembar Data | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) |
| Deskripsi Produk |  |  | [Link](http://www.intel.com/content/www/us/en/processors/core/6th-gen-core-family-desktop-brief.html) |  |  |  |  |  |  | [Link](http://www.intel.com/content/www/us/en/processors/core/6th-gen-core-family-desktop-brief.html) |  |
| **-**  Spesifikasi Memori | | | | | | | | | | | |
| Ukuran Memori Maks (bergantung jenis memori) | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB |
| Jenis Memori | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V |
| Jumlah Maksimum Saluran Memori | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Bandwidth Memori Maks | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s |
| Mendukung Memori ECC ‡ | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak |
| **-**  Spesifikasi Grafis | | | | | | | | | | | |
| Grafis Prosesor ‡ | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 510 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 | Intel® HD Graphics 530 |
| Frekuensi Dasar Grafik | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz | 350.00 MHz |
| Frekuensi Dinamis Maks Grafik | 1.15 GHz | 1.10 GHz | 1.15 GHz | 950.00 MHz | 950.00 MHz | 950.00 MHz | 1.10 GHz | 1.05 GHz | 1.10 GHz | 1.15 GHz | 1.15 GHz |
| Memori Maks Video Grafik | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB | 64 GB |
| Output Grafis | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI |
| Dukungan 4K | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz |
| Resolusi Maksimum (Intel® WiDi)‡ | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p | 1080p |
| Resolusi Maksimum (HDMI 1.4)‡ | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz |
| Resolusi Maksimum (DP)‡ | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz |
| Resolusi Maksimum (eDP - Panel Datar Terintegrasi)‡ | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz |
| Resolusi Maksimum (VGA)‡ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dukungan DirectX\* | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Dukungan OpenGL\* | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| Intel® Quick Sync Video | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® InTru™ 3D Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Wireless Display | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Clear Video HD Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Clear Video Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Jumlah Layar yang Didukung‡ | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| ID Perangkat | 0x1912 | 0x1912 | 0x1912 | 0x1912 | 0x1912 | 0x1902 | 0x1912 | 0x1912 | 0x1912 | 0x1912 | 0x1912 |
| **-**  Opsi Ekspansi | | | | | | | | | | | |
| Kemudahan untuk Diskalakan | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only | 1S Only |
| Revisi PCI Express | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Konfigurasi PCI Express ‡ | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 | Up to 1x16, 2x8, 1x8+2x4 |
| Jumlah Maksimal Jalur PCI Express | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| **-**  Spesifikasi Paket | | | | | | | | | | | |
| Soket yang Didukung | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 | FCLGA1151 |
| Konfigurasi CPU Maks | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Spesifikasi Solusi Termal | PCG 2015C (65W) | PCG 2015A (35W) | PCG 2015D (130W) | PCG 2015A (35W) | PCG 2015C (65W) | PCG 2015C (65W) | PCG 2015A (35W) | PCG 2015C (65W) | PCG 2015A (35W) | PCG 2015D (130W) | PCG 2015C (65W) |
| TCASE | 71°C | 66°C | 64°C | 66°C | 71°C | 71°C | 66°C | 71°C | 66°C | 64°C | 71°C |
| Ukuran Paket | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm | 37.5mm x 37.5mm |
| Opsi Halogen Rendah Tersedia | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS | Lihat MDDS |
| **-**  Teknologi Canggih | | | | | | | | | | | |
| Intel® Turbo Boost Technology ‡ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Intel® vPro™ Technology ‡ | Ya | Ya | Tidak | Tidak | Tidak | Tidak | Ya | Ya | Ya | Tidak | Ya |
| Intel® Hyper-Threading Technology ‡ | Ya | Ya | Ya | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak | Tidak |
| Intel® Virtualization Technology (VT-x) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® VT-x dengan Extended Page Tables (EPT) ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® TSX-NI | Ya | Ya | Ya | Tidak | Tidak | Tidak | Ya | Ya | Ya | Ya | Ya |
| Intel® 64 ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Set Instruksi | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit | 64-bit |
| Ekstensi Set Instruksi | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 |
| Keadaan Diam | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Enhanced Intel SpeedStep® Technology | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Teknologi Pemantauan Panas | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Identity Protection Technology ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Stable Image Platform Program (SIPP) | Ya | Ya | Tidak | Tidak | Tidak | Tidak | Ya | Ya | Ya | Tidak | Ya |
| Keunggulan Intel® untuk Usaha Kecil | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| **-**  Intel® Data Protection Technology | | | | | | | | | | | |
| Pentunjuk Baru Intel® AES | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Kode Keamanan | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Software Guard Extensions (Intel®SGX) | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Intel® Memory Protection Extensions (Intel® MPX) | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| **-**  Intel® Platform Protection Technology | | | | | | | | | | | |
| OS Guard | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |
| Trusted Execution Technology‡ | Ya | Ya | Tidak | Tidak | Tidak | Tidak | Ya | Ya | Ya | Tidak | Ya |
| Execute Disable Bit ‡ | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya | Ya |

**Tahun 2016**

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| Nama Produk | [Intel® Core™ i7-6785R Processor (8M Cache, up to 3.90 GHz)](http://ark.intel.com/id/products/93339/Intel-Core-i7-6785R-Processor-8M-Cache-up-to-3_90-GHz) | [Intel® Core™ i5-6585R Processor (6M Cache, up to 3.60 GHz)](http://ark.intel.com/id/products/93337/Intel-Core-i5-6585R-Processor-6M-Cache-up-to-3_60-GHz) | [Intel® Core™ i5-6685R Processor (6M Cache, up to 3.80 GHz)](http://ark.intel.com/id/products/93338/Intel-Core-i5-6685R-Processor-6M-Cache-up-to-3_80-GHz) |
| Nama Kode | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) | [Skylake](http://ark.intel.com/id/products/codename/37572/Skylake) |
| **-**  Hal Penting | | | |
| Nomor Prosesor | i7-6785R | i5-6585R | i5-6685R |
| Status | Launched | Launched | Launched |
| Tanggal Peluncuran | Q2'16 | Q2'16 | Q2'16 |
| Litografi | 14 nm | 14 nm | 14 nm |
| Rekomendasi Harga Pelanggan | N/A | N/A | N/A |
| **-**  Performa | | | |
| Jumlah Inti | 4 | 4 | 4 |
| Jumlah Untaian | 8 | 4 | 4 |
| Frekuensi Dasar Prosesor | 3.30 GHz | 2.80 GHz | 3.20 GHz |
| Frekuensi Turbo Maks | 3.90 GHz | 3.60 GHz | 3.80 GHz |
| Cache | 8 MB | 6 MB | 6 MB |
| Kecepatan Bus | 8 GT/s DMI3 | 8 GT/s DMI3 | 8 GT/s DMI3 |
| TDP | 65 W | 65 W | 65 W |
| **-**  Informasi Tambahan | | | |
| Tersedia Opsi Terpasang | Tidak | Tidak | Tidak |
| Bebas Konflik | Ya | Ya | Ya |
| Lembar Data | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) | [Link](http://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html) |
| **-**  Spesifikasi Memori | | | |
| Ukuran Memori Maks (bergantung jenis memori) | 64 GB | 64 GB | 64 GB |
| Jenis Memori | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V | DDR4-1866/2133, DDR3L-1333/1600 @ 1.35V |
| Jumlah Maksimum Saluran Memori | 2 | 2 | 2 |
| Bandwidth Memori Maks | 34,1 GB/s | 34,1 GB/s | 34,1 GB/s |
| Mendukung Memori ECC ‡ | Tidak | Tidak | Tidak |
| **-**  Spesifikasi Grafis | | | |
| Grafis Prosesor ‡ | Intel® Iris™ Pro Graphics 580 | Intel® Iris™ Pro Graphics 580 | Intel® Iris™ Pro Graphics 580 |
| Frekuensi Dasar Grafik | 350.00 MHz | 350.00 MHz | 350.00 MHz |
| Frekuensi Dinamis Maks Grafik | 1.15 GHz | 1.10 GHz | 1.15 GHz |
| Memori Maks Video Grafik | 64 GB | 64 GB | 64 GB |
| eDRAM | 128 MB | 128 MB | 128 MB |
| Output Grafis | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI | eDP/DP/HDMI/DVI |
| Dukungan 4K | Yes, at 60Hz | Yes, at 60Hz | Yes, at 60Hz |
| Resolusi Maksimum (Intel® WiDi)‡ | 1080p | 1080p | 1080p |
| Resolusi Maksimum (HDMI 1.4)‡ | 4096x2304@24Hz | 4096x2304@24Hz | 4096x2304@24Hz |
| Resolusi Maksimum (DP)‡ | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz |
| Resolusi Maksimum (eDP - Panel Datar Terintegrasi)‡ | 4096x2304@60Hz | 4096x2304@60Hz | 4096x2304@60Hz |
| Resolusi Maksimum (VGA)‡ | N/A | N/A | N/A |
| Dukungan DirectX\* | 12 | 12 | 12 |
| Dukungan OpenGL\* | 4.4 | 4.4 | 4.4 |
| Intel® Quick Sync Video | Ya | Ya | Ya |
| Intel® InTru™ 3D Technology | Ya | Ya | Ya |
| Intel® Wireless Display | Ya | Ya | Ya |
| Intel® Clear Video HD Technology | Ya | Ya | Ya |
| Intel® Clear Video Technology | Ya | Ya | Ya |
| Jumlah Layar yang Didukung ‡ | 3 | 3 | 3 |
| ID Perangkat | 0x193B | 0x193B | 0x193B |
| **-**  Opsi Ekspansi | | | |
| Kemudahan untuk Diskalakan | 1S Only | 1S Only | 1S Only |
| Revisi PCI Express | 3.0 | 3.0 | 3.0 |
| Konfigurasi PCI Express ‡ | 1x16,2x8,1x8+2x4 | 1x16,2x8,1x8+2x4 | 1x16,2x8,1x8+2x4 |
| Jumlah Maksimal Jalur PCI Express | 16 | 16 | 16 |
| **-**  Spesifikasi Paket | | | |
| Konfigurasi CPU Maks | 1 | 1 | 1 |
| Spesifikasi Solusi Termal | PCG 2015C (65W) | PCG 2015C (65W) | PCG 2015C (65W) |
| TCASE | 71°C | 71°C | 71°C |
| Ukuran Paket | 42mm x 28mm | 42mm x 28mm | 42mm x 28mm |
| Opsi Halogen Rendah Tersedia | Lihat MDDS | Lihat MDDS | Lihat MDDS |
| **-**  Teknologi Canggih | | | |
| Intel® Turbo Boost Technology‡ | 2.0 | 2.0 | 2.0 |
| Intel® vPro™ Technology ‡ | Tidak | Tidak | Tidak |
| Intel® Hyper-Threading Technology ‡ | Ya | Tidak | Tidak |
| Intel® Virtualization Technology (VT-x) ‡ | Ya | Ya | Ya |
| Intel® Virtualization Technology for Directed I/O (VT-d)‡ | Ya | Ya | Ya |
| Intel® VT-x dengan Extended Page Tables (EPT) ‡ | Ya | Ya | Ya |
| Intel® TSX-NI | Ya | Ya | Ya |
| Intel® 64 ‡ | Ya | Ya | Ya |
| Set Instruksi | 64-bit | 64-bit | 64-bit |
| Ekstensi Set Instruksi | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 | SSE4.1/4.2, AVX 2.0 |
| Keadaan Diam | Ya | Ya | Ya |
| Enhanced Intel SpeedStep® Technology | Ya | Ya | Ya |
| Teknologi Pemantauan Panas | Ya | Ya | Ya |
| Intel® Identity Protection Technology ‡ | Ya | Ya | Ya |
| Intel® Stable Image Platform Program (SIPP) | Tidak | Tidak | Tidak |
| Keunggulan Intel® untuk Usaha Kecil | Ya | Ya | Ya |
| **-**  Intel® Data Protection Technology | | | |
| Pentunjuk Baru Intel® AES | Ya | Ya | Ya |
| Kode Keamanan | Ya | Ya | Ya |
| Intel® Software Guard Extensions (Intel®SGX) | Ya | Ya | Ya |
| Intel® Memory Protection Extensions (Intel® MPX) | Ya | Ya | Ya |
| **-**  Intel® Platform Protection Technology | | | |
| OS Guard | Ya | Ya | Ya |
| Trusted Execution Technology‡ | Ya | Ya | Ya |
| Execute Disable Bit ‡ | Ya | Ya | Ya |