General information	
Type	CPU / Microprocessor
Market segment	Desktop
Family	AMD Ryzen 5
Model number	**1600X**
CPU part numbers	**YD160XBCM6IAE** is an OEM/tray microprocessor **YD160XBCAEWOF** is a boxed microprocessor without fan and heatsink
Frequency	**3600 MHz**
Maximum turbo frequency	4000 MHz
Package	1331-pin lidded micro-PGA package
Socket	**Socket AM4**
Introduction date	March 15, 2017 (announcement) April 11, 2017 (launch)
Price at introduction	$249
Architecture / Microarchitecture	
Microarchitecture	Zen
Processor core	Summit Ridge
Core stepping	B1
CPUID	800F11
Manufacturing process	0.014 micron FinFET process 4.8 billion transistors
Data width	**64 bit**
The number of CPU cores	**6**
The number of threads	**12**
Floating Point Unit	Integrated
Level 1 cache size	6 x 64 KB 4-way set associative instruction caches 6 x 32 KB 8-way set associative data caches
Level 2 cache size	**6 x 512 KB inclusive 8-way set associative unified caches**
Level 3 cache size	**2 x 8 MB exclusive 16-way set associative shared caches**
Multiprocessing	Uniprocessor
Features	- MMX instructions - Extensions to MMX - SSE / Streaming SIMD Extensions - SSE2 / Streaming SIMD Extensions 2 - SSE3 / Streaming SIMD Extensions 3 - SSSE3 / Supplemental Streaming SIMD Extensions 3 - SSE4 / SSE4.1 + SSE4.2 / Streaming SIMD Extensions 4 - SSE4a - AES / Advanced Encryption Standard instructions - AVX / Advanced Vector Extensions - AVX2 / Advanced Vector Extensions 2.0

	• BMI / BMI1 + BMI2 / Bit Manipulation instructions • SHA / Secure Hash Algorithm extensions • F16C / 16-bit Floating-Point conversion instructions • FMA3 / 3-operand Fused Multiply-Add instructions • AMD64 / AMD 64-bit technology • SMT / Simultaneous MultiThreading • EVP / Enhanced Virus Protection • AMD-V / AMD Virtualization technology • SMAP / Supervisor Mode Access Prevention • SMEP / Secure Mode Execution Protection • Precision Boost • Extended Frequency Range
Low power features	Pure Power
Integrated peripherals / components	
Integrated graphics	None
Memory controller	The number of controllers: 2 Memory channels per controller: 1 Channel width (bits): 64 Supported memory: DDR4-2666 [1] DIMMs per channel: 2 Maximum memory bandwidth (GB/s): 42.7 [1]
Electrical / Thermal parameters	
Thermal Design Power	**95 Watt**
Notes on AMD Ryzen 5 1600X	
• The processor has unlocked clock multiplier • The maximum operating frequency is 4.1 GHz when better than stock cooling is used [1] - Information is not confirmed	