



TDP Level95.0 W @ 37x			
Temperature 048 degC (118 degF) (Package)			
Temperature 149 degC (120 degF) (Cores (Max))			
Temperature 246 degC (114 degF) (Core #0)			
Temperature 352 degC (125 degF) (Core #1)			
Temperature 447 degC (116 degF) (Core #2)			
Temperature 546 degC (114 degF) (Core #3)			
Temperature 649 degC (120 degF) (Core #4)			
Temperature 751 degC (123 degF) (Core #5)			
Voltage 01.34 Volts (VID)			
Power 0027.61 W (Package)			
Power 0124.65 W (IA Cores)			
Power 020.59 W (GT)			
Power 032.42 W (DRAM)			
Clock Speed 04297.74 MHz (Core #0)			
Clock Speed 14297.74 MHz (Core #1)			
Clock Speed 24297.74 MHz (Core #2)			
Clock Speed 34297.74 MHz (Core #3)			
Clock Speed 44297.74 MHz (Core #4)			
Clock Speed 54297.74 MHz (Core #5)			
Core 0 max ratio46.00 (effective 44.00)			
Core 1 max ratio46.00 (effective 43.00)			
Core 2 max ratio46.00 (effective 44.00)			
Core 3 max ratio46.00 (effective 43.00)			
Core 4 max ratio46.00 (effective 43.00)			
Core 5 max ratio46.00 (effective 45.00)			
Thread dumps			
-----			
-----			
CPU Thread 0			
APIC ID0			
TopologyProcessor ID 0	Core ID 0	Thread ID 0	
Cache descriptorLevel 1	D	32 KB	2 thread(s)
Cache descriptorLevel 1	I	32 KB	2 thread(s)
Cache descriptorLevel 2	U	256 KB	2 thread(s)
Cache descriptorLevel 3	U	9 MB	16 thread(s)
CPLUID			
0x000000000x000000160x756E6547			
0x6C65746E0x49656E69			
0x000000010x000906ED0x00100800			
0xFFFAF38F0xBFEBFBFF			
0x000000020x760363010x00F0B6FF			
0x000000000x00C30000			
0x000000030x000000000x00000000			
0x000000000x00000000			
0x000000040x1C0041210x01C0003F			
0x0000003F0x00000000			
0x000000040x1C0041220x01C0003F			
0x0000003F0x00000000			
0x000000040x1C0041430x00C0003F			
0x000003FF0x00000000			
0x000000040x1C03C1630x02C0003F			
0x00002FFF0x00000006			
0x000000050x000000400x00000040			
0x000000030x00042120			
0x000000060x000007F30x00000002			
0x000000010x00000000			
0x000000070x000000000x009C67A9			
0x000000000xBC000400			
0x000000080x000000000x00000000			
0x000000000x00000000			
0x000000090x000000000x00000000			
0x000000000x00000000			
0x0000000A0x073008040x00000000			
0x000000000x00000603			
0x0000000B0x000000010x00000001			
0x000001000x00000000			
0x0000000B0x00000040x00000006			
0x000002010x00000000			

0x0000000C0x00000000x00000000  
0x00000000x00000000

0x0000000D0x0000001F0x00000440  
0x00000440x00000000

0x0000000D0x0000000F0x000003C0  
0x00000000x00000000

0x0000000D0x000001000x00000240  
0x00000000x00000000

0x0000000D0x000000400x000003C0  
0x00000000x00000000

0x0000000D0x000000400x00000400  
0x00000000x00000000

0x0000000E0x00000000x00000000  
0x00000000x00000000

0x0000000F0x00000000x00000000  
0x00000000x00000000

0x000000100x00000000x00000000  
0x00000000x00000000

0x000000110x00000000x00000000  
0x00000000x00000000

0x000000120x00000000x00000000  
0x00000000x00000000

0x000000130x00000000x00000000  
0x00000000x00000000

0x000000140x00000010x0000000F  
0x00000030x00000000

0x000000150x000000020x00000134  
0x00000000x00000000

0x000000160x00000000x00000000  
0x00000000x00000000

0x40000000x4000000C0x7263694D  
0x666F736F0x76482074

0x400000010x312376480x00000000  
0x00000000x00000000

0x400000020x0000585D0x000A0000  
0x000000020x0000097C

0x400000030x00003FF0x002BB9FF  
0x000000220x7DFEFBF6

0x400000040x00060D1C0x00000000  
0x0000002E0x00000000

0x400000050x000004000x00000400  
0x0000045C0x00000000

0x400000060x007200AF0x00000027  
0x00000000x00000000

0x400000070x800000070x0000000B  
0x00000000x00000000

0x400000080x000000000x00000000  
0x00000000x00000000

0x400000090x000000000x00000000  
0x00000000x00000000

0x4000000A0x000000000x00000000  
0x00000000x00000000

0x4000000B0x001FF0020x00000000  
0x00000000x00000000

0x4000000C0x000000000x00000000  
0x00000000x00000000

0x800000000x800000080x00000000  
0x00000000x00000000

0x800000010x000000000x00000000  
0x000001210x2C100800

0x800000020x65746E490x2952286C  
0x726F43200x4D542865

0x800000030x356920290x3036392D  
0x43204B300x40205550

0x800000040x372E33200x7A484730  
0x00000000x00000000

0x800000050x000000000x00000000  
0x00000000x00000000

0x800000060x000000000x00000000  
0x010060400x00000000

0x800000070x000000000x00000000  
0x00000000x00000100

0x800000080x000030270x00000000 0x000000000x00000000			
MSR 0x0000001B0x000000000xFEE0D00			
MSR 0x000000350x000000000x00060006			
MSR 0x000001A00x000000000x00850889			
MSR 0x000007700x000000000x00000001			
MSR 0x000007740x0000019E0x0000FF25			
MSR 0x000000CE0x080808380xF1012500			
MSR 0x000000170x000400000x00000000			
MSR 0x000000C10x0000FFFF0xFFFC3A73			
MSR 0x000000C20x0000004C0x366F1D3A			
MSR 0x000000C30x000000B50x7EB09519			
MSR 0x000000C40x000001680xE204A1C2			
MSR 0x000001860x000000000x0051003C			
MSR 0x000001870x000000000x0041FF88			
MSR 0x000001AD0x2B2B2BC0x2C2D2D2E			
MSR 0x000001940x000000000x000F0000			
MSR 0x0000019A0x000000000x00000000			
MSR 0x0000019C0x000000000x882C0008			
MSR 0x000001A20x000000000x00641000			
MSR 0x000001A40x000000000x00000000			
MSR 0x000001B10x000000000x882C0008			
MSR 0x000001FC0x000000000x0038005D			
MSR 0x000006060x000000000x000A0E03			
MSR 0x000006010x000000000x80000000			
MSR 0x000006100x004287F80x001D87F8			
MSR 0x000006110x000000000xB796185D			
MSR 0x000006390x000000000xA1BF4BFD			
MSR 0x000006410x000000000x026DF6A9			
MSR 0x000006190x000000000x1082D6BD			
MSR 0x000006140x000000000x000002F8			
MSR 0x000006480x000000000x00000025			
MSR 0x000006490x000000000x00000000			
MSR 0x0000064A0x000000000x00000000			
MSR 0x000001980x0000281F0x00002B00			
MSR 0x000001990x000000000x0000FF00			
CPU Thread 1			
APIC ID2			
Topology	Processor ID 0	Core ID 1	Thread ID 0
Cache descriptor	Level 1	D	32 KB
		2 thread(s)	

Cache descriptorLevel 1	I	32 KB	2 thread(s)
Cache descriptorLevel 2	U	256 KB	2 thread(s)
Cache descriptorLevel 3	U	9 MB	16 thread(s)
CPUID			
0x00000000x000000160x756E6547 0x6C65746E0x49656E69			
0x000000010x000906ED0x02100800 0xFFFAF38F0xBFEBFBFF			
0x000000020x760363010x00F0B6FF 0x000000000x00C30000			
0x000000030x000000000x00000000 0x000000000x00000000			
0x000000040x1C0041210x01C0003F 0x00000003F0x00000000			
0x000000040x1C0041220x01C0003F 0x00000003F0x00000000			
0x000000040x1C0041430x00C0003F 0x0000003FF0x00000000			
0x000000040x1C03C1630x02C0003F 0x00002FFF0x00000006			
0x000000050x000000400x00000040 0x000000030x00042120			
0x000000060x000007F30x00000002 0x000000010x00000000			
0x000000070x000000000x009C67A9 0x000000000xBC000400			
0x000000080x000000000x00000000 0x000000000x00000000			
0x000000090x000000000x00000000 0x000000000x00000000			
0x0000000A0x073008040x00000000 0x000000000x00000603			
0x0000000B0x000000010x00000001 0x000001000x00000002			
0x0000000B0x000000040x00000006 0x000002010x00000002			
0x0000000C0x000000000x00000000 0x000000000x00000000			
0x0000000D0x0000001F0x00000440 0x000004400x00000000			
0x0000000D0x0000000F0x000003C0 0x000000000x00000000			
0x0000000D0x000001000x00000240 0x000000000x00000000			
0x0000000D0x000000400x000003C0 0x000000000x00000000			
0x0000000D0x000000400x00000400 0x000000000x00000000			
0x0000000E0x000000000x00000000 0x000000000x00000000			
0x0000000F0x000000000x00000000 0x000000000x00000000			
0x000000100x000000000x00000000 0x000000000x00000000			
0x000000110x000000000x00000000 0x000000000x00000000			
0x000000120x000000000x00000000 0x000000000x00000000			
0x000000130x000000000x00000000 0x000000000x00000000			
0x000000140x000000010x0000000F 0x000000030x00000000			
0x000000150x000000020x00000134 0x000000000x00000000			
0x000000160x000000000x00000000 0x000000000x00000000			
0x400000000x4000000C0x7263694D 0x666F736F0x76482074			
0x400000010x312376480x00000000 0x000000000x00000000			
0x400000020x0000585D0x000A0000 0x000000020x0000097C			
0x400000030x00003FFF0x002BB9FF 0x000000220x7DFEFBF6			

0x400000040x00060D1C0x00000000  
0x0000002E0x00000000

0x400000050x000004000x00000400  
0x0000045C0x00000000

0x400000060x007200AF0x00000027  
0x000000000x00000000

0x400000070x800000070x0000000B  
0x000000000x00000000

0x400000080x000000000x00000000  
0x000000000x00000000

0x400000090x000000000x00000000  
0x000000000x00000000

0x4000000A0x000000000x00000000  
0x000000000x00000000

0x4000000B0x001FF0020x00000000  
0x000000000x00000000

0x4000000C0x000000000x00000000  
0x000000000x00000000

0x800000000x800000080x00000000  
0x000000000x00000000

0x800000010x000000000x00000000  
0x000001210x2C100800

0x800000020x65746E490x2952286C  
0x726F43200x4D542865

0x800000030x356920290x3036392D  
0x43204B300x40205550

0x800000040x372E33200x7A484730  
0x000000000x00000000

0x800000050x000000000x00000000  
0x000000000x00000000

0x800000060x000000000x00000000  
0x010060400x00000000

0x800000070x000000000x00000000  
0x000000000x00000100

0x800000080x000030270x00000000  
0x000000000x00000000

MSR  
0x0000001B0x000000000xFEE00C00

MSR  
0x000000350x000000000x00060006

MSR  
0x000001A00x000000000x00850889

MSR  
0x000007700x000000000x00000001

MSR  
0x000007740x0000019E0x0000FF25

MSR  
0x000000CE0x080808380xF1012500

MSR  
0x000000170x000400000x00000000

MSR  
0x000000C10x0000FFFF0xFFEFD0C7

MSR  
0x000000C20x000000680x87749DF2

MSR  
0x000000C30x0000013C0xD5D09BE1

MSR  
0x000000C40x000001D70xBBBC74218

MSR  
0x000001860x000000000x0051003C

MSR  
0x000001870x000000000x0041FF88

MSR  
0x000001AD0x2B2B2B2C0x2C2D2D2E

MSR  
0x000001940x000000000x000F0000

MSR  
0x0000019A0x000000000x00000000

MSR  
0x0000019C0x000000000x882B0008

MSR  
0x000001A20x000000000x00641000

MSR 0x000001A40x000000000x00000000			
MSR 0x000001B10x000000000x882B0008			
MSR 0x000001FC0x000000000x0038005D			
MSR 0x000006060x000000000x000A0E03			
MSR 0x000006010x000000000x80000000			
MSR 0x000006100x004287F80x001D87F8			
MSR 0x000006110x000000000xB796357A			
MSR 0x000006390x000000000xA1BF6842			
MSR 0x000006410x000000000x026DF6A9			
MSR 0x000006190x000000000x1082D888			
MSR 0x000006140x000000000x000002F8			
MSR 0x000006480x000000000x00000025			
MSR 0x000006490x000000000x00000000			
MSR 0x0000064A0x000000000x00000000			
MSR 0x000001980x000027760x00002B00			
MSR 0x000001990x000000000x00002500			
CPU Thread 2			
APIC ID4			
Topology	Processor ID 0	Core ID 2	Thread ID 0
Cache descriptor	Level 1	D	32 KB
Cache descriptor	Level 1	I	32 KB
Cache descriptor	Level 2	U	256 KB
Cache descriptor	Level 3	U	9 MB
CPUTID			
0x000000000x000000160x756E6547			
0x6C65746E0x49656E69			
0x000000010x000906ED0x04100800			
0xFFFFAF38F0xBFEBFBFF			
0x000000020x760363010x00F0B6FF			
0x000000000x00C30000			
0x000000030x000000000x00000000			
0x000000000x00000000			
0x000000040x1C0041210x01C0003F			
0x0000003F0x00000000			
0x000000040x1C0041220x01C0003F			
0x0000003F0x00000000			
0x000000040x1C0041430x00C0003F			
0x000003FF0x00000000			
0x000000040x1C03C1630x02C0003F			
0x00002FFF0x00000006			
0x000000050x000000400x00000040			
0x000000030x00042120			
0x000000060x000007F30x00000002			
0x000000010x00000000			
0x000000070x000000000x009C67A9			
0x000000000xBC000400			
0x000000080x000000000x00000000			
0x000000000x00000000			
0x000000090x000000000x00000000			
0x000000000x00000000			
0x0000000A0x073008040x00000000			
0x000000000x00000603			
0x0000000B0x000000010x00000001			
0x000001000x00000004			
0x0000000B0x000000040x00000006			
0x000002010x00000004			
0x0000000C0x000000000x00000000			
0x000000000x00000000			

0x0000000D0x0000001F0x00000440 0x000004400x00000000
0x0000000D0x0000000F0x000003C0 0x000000000x00000000
0x0000000D0x000001000x00000240 0x000000000x00000000
0x0000000D0x000000400x000003C0 0x000000000x00000000
0x0000000D0x000000400x00000400 0x000000000x00000000
0x0000000E0x000000000x00000000 0x000000000x00000000
0x0000000F0x000000000x00000000 0x000000000x00000000
0x000000100x000000000x00000000 0x000000000x00000000
0x000000110x000000000x00000000 0x000000000x00000000
0x000000120x000000000x00000000 0x000000000x00000000
0x000000130x000000000x00000000 0x000000000x00000000
0x000000140x000000010x0000000F 0x000000030x00000000
0x000000150x000000020x00000134 0x000000000x00000000
0x000000160x000000000x00000000 0x000000000x00000000
0x400000000x4000000C0x7263694D 0x666F736F0x76482074
0x400000010x312376480x00000000 0x000000000x00000000
0x400000020x0000585D0x000A0000 0x000000020x0000097C
0x400000030x00003FFF0x002BB9FF 0x000000220x7DFEFBF6
0x400000040x00060D1C0x00000000 0x0000002E0x00000000
0x400000050x000004000x00000400 0x0000045C0x00000000
0x400000060x007200AF0x00000027 0x000000000x00000000
0x400000070x800000070x0000000B 0x000000000x00000000
0x400000080x000000000x00000000 0x000000000x00000000
0x400000090x000000000x00000000 0x000000000x00000000
0x4000000A0x000000000x00000000 0x000000000x00000000
0x4000000B0x001FF0020x00000000 0x000000000x00000000
0x4000000C0x000000000x00000000 0x000000000x00000000
0x800000000x800000080x00000000 0x000000000x00000000
0x800000010x000000000x00000000 0x000001210x2C100800
0x800000020x65746E490x2952286C 0x726F43200x4D542865
0x800000030x356920290x3036392D 0x43204B300x40205550
0x800000040x372E33200x7A484730 0x000000000x00000000
0x800000050x000000000x00000000 0x000000000x00000000
0x800000060x000000000x00000000 0x010060400x00000000
0x800000070x000000000x00000000 0x000000000x00000100
0x800000080x000030270x00000000 0x000000000x00000000



MSR 0x0000001B0x00000000x0FEE00C00			
MSR 0x000000350x00000000x00060006			
MSR 0x000001A00x00000000x00850889			
MSR 0x000007700x00000000x00000001			
MSR 0x000007740x0000019E0x0000FF25			
MSR 0x000000CE0x080808380xF1012500			
MSR 0x000000170x000400000x00000000			
MSR 0x000000C10x0000FFFF0xFFEFF494			
MSR 0x000000C20x0000006B0x1A854DE4			
MSR 0x000000C30x000000FF0x77E5E8D4			
MSR 0x000000C40x000001C40x8355FED3			
MSR 0x000001860x000000000x0051003C			
MSR 0x000001870x000000000x0041FF88			
MSR 0x000001AD0x2B2B2B2C0x2C2D2D2E			
MSR 0x000001940x000000000x000F0000			
MSR 0x0000019A0x000000000x00000000			
MSR 0x0000019C0x000000000x882C0008			
MSR 0x000001A20x000000000x00641000			
MSR 0x000001A40x000000000x00000000			
MSR 0x000001B10x000000000x882A0008			
MSR 0x000001FC0x000000000x0038005D			
MSR 0x000006060x000000000x000A0E03			
MSR 0x000006010x000000000x80000000			
MSR 0x000006100x004287F80x001D87F8			
MSR 0x000006110x000000000xB7965911			
MSR 0x000006390x000000000xA1BF8AF0			
MSR 0x000006410x000000000x026DF6A9			
MSR 0x000006190x000000000x1082DA8E			
MSR 0x000006140x000000000x000002F8			
MSR 0x000006480x000000000x00000025			
MSR 0x000006490x000000000x00000000			
MSR 0x0000064A0x000000000x00000000			
MSR 0x000001980x000028190x00002B00			
MSR 0x000001990x000000000x00002500			
CPU Thread 3			
APIC ID6			
TopologyProcessor ID 0	Core ID 3	Thread ID 0	
Cache descriptorLevel 1	D	32 KB	2 thread(s)
Cache descriptorLevel 1	I	32 KB	2 thread(s)
Cache descriptorLevel 2	U	256 KB	2 thread(s)
Cache descriptorLevel 3	U	9 MB	16 thread(s)

CPUID
0x00000000x000000160x756E6547 0x6C65746E0x49656E69
0x000000010x000906ED0x06100800 0xFFFAF38F0xBFEBFBFF
0x000000020x760363010x00F0B6FF 0x00000000x00C30000
0x000000030x00000000x00000000 0x00000000x00000000
0x000000040x1C0041210x01C0003F 0x0000003F0x00000000
0x000000040x1C0041220x01C0003F 0x0000003F0x00000000
0x000000040x1C0041430x00C0003F 0x0000003FF0x00000000
0x000000040x1C03C1630x02C0003F 0x00002FFF0x00000006
0x000000050x000000400x00000040 0x00000030x00042120
0x000000060x000007F30x00000002 0x000000010x00000000
0x000000070x00000000x009C67A9 0x00000000xBC000400
0x000000080x00000000x00000000 0x00000000x00000000
0x000000090x00000000x00000000 0x00000000x00000000
0x0000000A0x073008040x00000000 0x00000000x00000603
0x0000000B0x000000010x00000001 0x000001000x00000006
0x0000000B0x00000040x00000006 0x000002010x00000006
0x0000000C0x00000000x00000000 0x00000000x00000000
0x0000000D0x0000001F0x00000440 0x000004400x00000000
0x0000000D0x000000F0x000003C0 0x00000000x00000000
0x0000000D0x000001000x00000240 0x00000000x00000000
0x0000000D0x000000400x000003C0 0x00000000x00000000
0x0000000D0x000000400x00000400 0x00000000x00000000
0x0000000E0x00000000x00000000 0x00000000x00000000
0x0000000F0x00000000x00000000 0x00000000x00000000
0x000000100x00000000x00000000 0x00000000x00000000
0x000000110x00000000x00000000 0x00000000x00000000
0x000000120x00000000x00000000 0x00000000x00000000
0x000000130x00000000x00000000 0x00000000x00000000
0x000000140x000000010x0000000F 0x00000030x00000000
0x000000150x00000020x00000134 0x00000000x00000000
0x000000160x00000000x00000000 0x00000000x00000000
0x400000000x4000000C0x7263694D 0x666F736F0x76482074
0x400000010x312376480x00000000 0x00000000x00000000
0x400000020x0000585D0x000A0000 0x000000020x0000097C
0x400000030x00003FFF0x002BB9FF 0x00000020x7DFEFBF6
0x400000040x00060D1C0x00000000 0x0000002E0x00000000

0x400000050x000004000x00000400  
0x0000045C0x00000000

0x400000060x007200AF0x00000027  
0x000000000x00000000

0x400000070x800000070x0000000B  
0x000000000x00000000

0x400000080x000000000x00000000  
0x000000000x00000000

0x400000090x000000000x00000000  
0x000000000x00000000

0x4000000A0x000000000x00000000  
0x000000000x00000000

0x4000000B0x001FF0020x00000000  
0x000000000x00000000

0x4000000C0x000000000x00000000  
0x000000000x00000000

0x800000000x800000080x00000000  
0x000000000x00000000

0x800000010x000000000x00000000  
0x000001210x2C100800

0x800000020x65746E490x2952286C  
0x726F43200x4D542865

0x800000030x356920290x3036392D  
0x43204B300x40205550

0x800000040x372E33200x7A484730  
0x000000000x00000000

0x800000050x000000000x00000000  
0x000000000x00000000

0x800000060x000000000x00000000  
0x010060400x00000000

0x800000070x000000000x00000000  
0x000000000x00000100

0x800000080x000030270x00000000  
0x000000000x00000000

MSR  
0x0000001B0x000000000xFEE00C00

MSR  
0x000000350x000000000x00060006

MSR  
0x000001A00x000000000x00850889

MSR  
0x000007700x000000000x00000001

MSR  
0x000007740x0000019E0x0000FF25

MSR  
0x000000CE0x080808380xF1012500

MSR  
0x000000170x000400000x00000000

MSR  
0x000000C10x0000FFFF0xFF1F67D

MSR  
0x000000C20x000000550xC705A802

MSR  
0x000000C30x000000C80x23038AFC

MSR  
0x000000C40x0000016F0xAB1F874F

MSR  
0x000001860x000000000x0051003C

MSR  
0x000001870x000000000x0041FF88

MSR  
0x000001AD0x2B2B2B2C0x2C2D2D2E

MSR  
0x000001940x000000000x000F0000

MSR  
0x0000019A0x000000000x00000000

MSR  
0x0000019C0x000000000x882B0008

MSR  
0x000001A20x000000000x00641000

MSR  
0x000001A40x000000000x00000000

MSR 0x000001B10x000000000x882A0008			
MSR 0x000001FC0x000000000x0038005D			
MSR 0x000006060x000000000x000A0E03			
MSR 0x000006010x000000000x80000000			
MSR 0x000006100x004287F80x001D87F8			
MSR 0x000006110x000000000xB79682F5			
MSR 0x000006390x000000000xA1BFB2ED			
MSR 0x000006410x000000000x026DF6A9			
MSR 0x000006190x000000000x1082DCF5			
MSR 0x000006140x000000000x000002F8			
MSR 0x000006480x000000000x00000025			
MSR 0x000006490x000000000x00000000			
MSR 0x0000064A0x000000000x00000000			
MSR 0x000001980x0000282F0x00002B00			
MSR 0x000001990x000000000x00002500			
CPU Thread 4			
APIC ID8			
Topology	Processor ID 0	Core ID 4	Thread ID 0
Cache descriptor	Level 1	D	32 KB
Cache descriptor	Level 1	I	32 KB
Cache descriptor	Level 2	U	256 KB
Cache descriptor	Level 3	U	9 MB
CPUID			
0x000000000x000000160x756E6547 0x6C65746E0x49656E69			
0x000000010x000906ED0x08100800 0xFFFAF38F0xBFEBFBFF			
0x000000020x760363010x00F0B6FF 0x000000000x00C30000			
0x000000030x000000000x00000000 0x000000000x00000000			
0x000000040x1C0041210x01C0003F 0x00000003F0x00000000			
0x000000040x1C0041220x01C0003F 0x00000003F0x00000000			
0x000000040x1C0041430x00C0003F 0x000003FF0x00000000			
0x000000040x1C03C1630x02C0003F 0x00002FFF0x00000006			
0x000000050x000000400x00000040 0x000000030x00042120			
0x000000060x000007F30x00000002 0x000000010x00000000			
0x000000070x000000000x009C67A9 0x000000000xBC000400			
0x000000080x000000000x00000000 0x000000000x00000000			
0x000000090x000000000x00000000 0x000000000x00000000			
0x0000000A0x073008040x00000000 0x000000000x00000603			
0x0000000B0x000000010x00000001 0x000001000x00000008			
0x0000000B0x000000040x00000006 0x000002010x00000008			
0x0000000C0x000000000x00000000 0x000000000x00000000			
0x0000000D0x0000001F0x00000440 0x000004400x00000000			

0x0000000D0x0000000F0x000003C0  
0x00000000x00000000

0x0000000D0x000001000x00000240  
0x00000000x00000000

0x0000000D0x000000400x000003C0  
0x00000000x00000000

0x0000000D0x000000400x00000400  
0x00000000x00000000

0x0000000E0x000000000x00000000  
0x00000000x00000000

0x0000000F0x000000000x00000000  
0x00000000x00000000

0x000000100x000000000x00000000  
0x00000000x00000000

0x000000110x000000000x00000000  
0x00000000x00000000

0x000000120x000000000x00000000  
0x00000000x00000000

0x000000130x000000000x00000000  
0x00000000x00000000

0x000000140x000000010x0000000F  
0x000000030x00000000

0x000000150x000000020x00000134  
0x00000000x00000000

0x000000160x000000000x00000000  
0x00000000x00000000

0x400000000x4000000C0x7263694D  
0x666F736F0x76482074

0x400000010x312376480x00000000  
0x00000000x00000000

0x400000020x0000585D0x000A0000  
0x000000020x0000097C

0x400000030x00003FF0x002BB9FF  
0x000000220x7DFEFBF6

0x400000040x00060D1C0x00000000  
0x0000002E0x00000000

0x400000050x000004000x00000400  
0x0000045C0x00000000

0x400000060x007200AF0x00000027  
0x000000000x00000000

0x400000070x800000070x0000000B  
0x000000000x00000000

0x400000080x000000000x00000000  
0x000000000x00000000

0x400000090x000000000x00000000  
0x000000000x00000000

0x4000000A0x000000000x00000000  
0x000000000x00000000

0x4000000B0x001FF0020x00000000  
0x000000000x00000000

0x4000000C0x000000000x00000000  
0x000000000x00000000

0x800000000x800000080x00000000  
0x000000000x00000000

0x800000010x000000000x00000000  
0x000001210x2C100800

0x800000020x65746E490x2952286C  
0x726F43200x4D542865

0x800000030x356920290x3036392D  
0x43204B300x40205550

0x800000040x372E33200x7A484730  
0x000000000x00000000

0x800000050x000000000x00000000  
0x000000000x00000000

0x800000060x000000000x00000000  
0x010060400x00000000

0x800000070x000000000x00000000  
0x000000000x00000100

0x800000080x000030270x00000000  
0x000000000x00000000

MSR  
0x0000001B0x000000000xFEE00C00

MSR 0x000000350x000000000x00060006			
MSR 0x000001A00x000000000x00850889			
MSR 0x000007700x000000000x00000001			
MSR 0x000007740x0000019E0x0000FF25			
MSR 0x000000CE0x080808380xF1012500			
MSR 0x000000170x000400000x00000000			
MSR 0x000000C10x0000FFFF0xFFFB1FC9			
MSR 0x000000C20x000000500xB76D7B05			
MSR 0x000000C30x000000C90x7F9C600D			
MSR 0x000000C40x000001590x305B84F8			
MSR 0x000001860x000000000x0051003C			
MSR 0x000001870x000000000x0041FF88			
MSR 0x000001AD0x2B2B2B2C0x2C2D2D2E			
MSR 0x000001940x000000000x000F0000			
MSR 0x0000019A0x000000000x00000000			
MSR 0x0000019C0x000000000x882C0008			
MSR 0x000001A20x000000000x00641000			
MSR 0x000001A40x000000000x00000000			
MSR 0x000001B10x000000000x88260008			
MSR 0x000001FC0x000000000x0038005D			
MSR 0x000006060x000000000x000A0E03			
MSR 0x000006010x000000000x80000000			
MSR 0x000006100x004287F80x001D87F8			
MSR 0x000006110x000000000xB796A5D8			
MSR 0x000006390x000000000xA1BFD329			
MSR 0x000006410x000000000x026DF6A9			
MSR 0x000006190x000000000x1082DF08			
MSR 0x000006140x000000000x000002F8			
MSR 0x000006480x000000000x00000025			
MSR 0x000006490x000000000x00000000			
MSR 0x0000064A0x000000000x00000000			
MSR 0x000001980x000027930x00002B00			
MSR 0x000001990x000000000x00002500			
CPU Thread 5			
APIC ID10			
Topology	Processor ID 0	Core ID 5	Thread ID 0
Cache descriptor	Level 1	D	32 KB
Cache descriptor	Level 1	I	32 KB
Cache descriptor	Level 2	U	256 KB
Cache descriptor	Level 3	U	9 MB
CPUID			
2 thread(s)			
2 thread(s)			
2 thread(s)			
16 thread(s)			

0x00000000x000000160x756E6547  
0x6C65746E0x49656E69

0x000000010x000906ED0x0A100800  
0xFFFFAF38F0xBFEBFBFF

0x000000020x760363010x00F0B6FF  
0x000000000x00C30000

0x000000030x000000000x00000000  
0x000000000x00000000

0x000000040x1C0041210x01C0003F  
0x00000003F0x00000000

0x000000040x1C0041220x01C0003F  
0x00000003F0x00000000

0x000000040x1C0041430x00C0003F  
0x0000003FF0x00000000

0x000000040x1C03C1630x02C0003F  
0x00002FFF0x00000006

0x000000050x000000400x00000040  
0x000000030x00042120

0x000000060x000007F30x00000002  
0x000000010x00000000

0x000000070x000000000x009C67A9  
0x000000000xBC000400

0x000000080x000000000x00000000  
0x000000000x00000000

0x000000090x000000000x00000000  
0x000000000x00000000

0x0000000A0x073008040x00000000  
0x000000000x00000603

0x0000000B0x000000010x00000001  
0x000001000x0000000A

0x0000000B0x000000040x00000006  
0x000002010x0000000A

0x0000000C0x000000000x00000000  
0x000000000x00000000

0x0000000D0x0000001F0x00000440  
0x000004400x00000000

0x0000000D0x0000000F0x000003C0  
0x000000000x00000000

0x0000000D0x000001000x00000240  
0x000000000x00000000

0x0000000D0x000000400x000003C0  
0x000000000x00000000

0x0000000D0x000000400x00000400  
0x000000000x00000000

0x0000000E0x000000000x00000000  
0x000000000x00000000

0x0000000F0x000000000x00000000  
0x000000000x00000000

0x000000100x000000000x00000000  
0x000000000x00000000

0x000000110x000000000x00000000  
0x000000000x00000000

0x000000120x000000000x00000000  
0x000000000x00000000

0x000000130x000000000x00000000  
0x000000000x00000000

0x000000140x000000010x0000000F  
0x000000030x00000000

0x000000150x000000020x00000134  
0x000000000x00000000

0x000000160x000000000x00000000  
0x000000000x00000000

0x400000000x4000000C0x7263694D  
0x666F736F0x76482074

0x400000010x312376480x00000000  
0x000000000x00000000

0x400000020x0000585D0x000A0000  
0x000000020x0000097C

0x400000030x00003FFF0x002BB9FF  
0x000000220x7DFEFBF6

0x400000040x00060D1C0x00000000  
0x0000002E0x00000000

0x400000050x000004000x00000400  
0x0000045C0x00000000

0x400000060x007200AF0x00000027  
0x000000000x00000000

0x400000070x800000070x0000000B  
0x000000000x00000000

0x400000080x000000000x00000000  
0x000000000x00000000

0x400000090x000000000x00000000  
0x000000000x00000000

0x4000000A0x000000000x00000000  
0x000000000x00000000

0x4000000B0x001FF0020x00000000  
0x000000000x00000000

0x4000000C0x000000000x00000000  
0x000000000x00000000

0x800000000x800000080x00000000  
0x000000000x00000000

0x800000010x000000000x00000000  
0x000001210x2C100800

0x800000020x65746E490x2952286C  
0x726F43200x4D542865

0x800000030x356920290x3036392D  
0x43204B300x40205550

0x800000040x372E33200x7A484730  
0x000000000x00000000

0x800000050x000000000x00000000  
0x000000000x00000000

0x800000060x000000000x00000000  
0x010060400x00000000

0x800000070x000000000x00000000  
0x000000000x00000100

0x800000080x000030270x00000000  
0x000000000x00000000

MSR  
0x0000001B0x000000000xFEE00C00

MSR  
0x000000350x000000000x00060006

MSR  
0x000001A00x000000000x00850889

MSR  
0x000007700x000000000x00000001

MSR  
0x000007740x0000019E0x0000FF25

MSR  
0x000000CE0x080808380xF1012500

MSR  
0x000000170x000400000x00000000

MSR  
0x000000C10x0000FFFF0xFF7475A

MSR  
0x000000C20x0000006B0x3077C2D8

MSR  
0x000000C30x000000E60x62D0B483

MSR  
0x000000C40x0000022A0x81E63214

MSR  
0x000001860x000000000x0051003C

MSR  
0x000001870x000000000x0041FF88

MSR  
0x000001AD0x2B2B2B2C0x2C2D2D2E

MSR  
0x000001940x000000000x000F0000

MSR  
0x0000019A0x000000000x00000000

MSR  
0x0000019C0x000000000x882C0008

MSR  
0x000001A20x000000000x00641000

MSR  
0x000001A40x000000000x00000000



MSR 0x000001B10x000000000x882A0008
MSR 0x000001FC0x000000000x0038005D
MSR 0x000006060x000000000x000A0E03
MSR 0x000006010x000000000x80000000
MSR 0x000006100x004287F80x001D87F8
MSR 0x000006110x000000000xB796C3E9
MSR 0x000006390x000000000xA1BFEF8E
MSR 0x000006410x000000000x026DF6A9
MSR 0x000006190x000000000x1082E0D0
MSR 0x000006140x000000000x000002F8
MSR 0x000006480x000000000x00000025
MSR 0x000006490x000000000x00000000
MSR 0x0000064A0x000000000x00000000
MSR 0x000001980x000027CC0x00002B00
MSR 0x000001990x000000000x00002500
BIOS ----- -----
UEFIYes
BIOS VendorAmerican Megatrends Inc.
BIOS MSG63-0100-000001-00101111-090216-Chipset
BIOS Date09/02/16
Mainboard Vendor000001
Chipset ----- -----
NorthbridgeIntel Coffee Lake rev. 0D
SouthbridgeIntel Z370 rev. 00
Bus SpecificationPCI-Express 3.0 (8.0 GT/s)
Graphic InterfacePCI-Express 3.0
PCI-E Link Widthx16 (max 16x)
PCI-E Link Speed8.0 GT/s (max 8.0 GT/s)
Memory TypeDDR4
Memory Size32 GBytes
ChannelsDual
Memory Frequency1599.0 MHz (3:48)
CAS# latency (CL)17.0
RAS# to CAS# delay (tRCD)18
RAS# Precharge (tRP)18
Cycle Time (tRAS)38
Row Refresh Cycle Time (tRFC)560
Command Rate (CR)2T
Uncore Frequency3997.9 MHz
Host Bridge0x3EC2
Memory SPD ----- -----
DIMM #1
SMBus address0x50
Memory typeDDR4
Module formatUDIMM
Module Manufacturer(ID)Corsair (7F7F9E000000000000000000000000)
SDRAM Manufacturer (ID)Nanya Technology (7F7F7F0B0000000000000000000000)
Size8192 MBytes
Max bandwidthDDR4-3002 (1501 MHz)
Max JEDECDDR4-2133 (1066 MHz)
Part numberCMK16GX4M2B3000C15

Nominal Voltage1.20 Volts	
EPPno	
XMPyes	rev. 2.0
AMPno	
EXPOno	
JEDEC timings tableCL-tRCD-tRP-tRAS-tRC @ frequency	
JEDEC #17.0-8-8-18-25 @ 533 MHz	
JEDEC #28.0-9-9-20-28 @ 600 MHz	
JEDEC #39.0-9-9-22-31 @ 666 MHz	
JEDEC #410.0-10-10-25-35 @ 733 MHz	
JEDEC #511.0-11-11-27-38 @ 800 MHz	
JEDEC #612.0-13-13-30-42 @ 900 MHz	
JEDEC #713.0-14-14-32-45 @ 966 MHz	
JEDEC #814.0-14-14-35-49 @ 1033 MHz	
JEDEC #915.0-15-15-36-50 @ 1066 MHz	
JEDEC #1016.0-15-15-36-50 @ 1066 MHz	
JEDEC #1117.0-15-15-36-50 @ 1066 MHz	
JEDEC #1218.0-15-15-36-50 @ 1066 MHz	
JEDEC #1319.0-15-15-36-50 @ 1066 MHz	
JEDEC #1420.0-15-15-36-50 @ 1066 MHz	
JEDEC #1521.0-15-15-36-50 @ 1066 MHz	
JEDEC #1622.0-15-15-36-50 @ 1066 MHz	
JEDEC #1723.0-15-15-36-50 @ 1066 MHz	
JEDEC #1824.0-15-15-36-50 @ 1066 MHz	
XMP profileXMP-3002	
SpecificationDDR4-3002	
VDD Voltage1.350 Volts	
Min Cycle time0.666 ns (1501 MHz)	
Max CL15.0	
Min tRP11.32 ns	
Min tRCD11.32 ns	
Min tRAS23.13 ns	
Min tRC34.63 ns	
Min tRRD4.00 ns	
XMP timings tableCL-tRCD-tRP-tRAS-tRC-CR @ frequency (voltage)	
XMP #17.0-8-8-17-25-n.a @ 700 MHz (1.350 Volts)	
XMP #28.0-10-10-19-28-n.a @ 800 MHz (1.350 Volts)	
XMP #39.0-11-11-21-32-n.a @ 900 MHz (1.350 Volts)	
XMP #410.0-12-12-24-35-n.a @ 1001 MHz (1.350 Volts)	
XMP #511.0-13-13-26-39-n.a @ 1101 MHz (1.350 Volts)	
XMP #612.0-14-14-28-42-n.a @ 1201 MHz (1.350 Volts)	
XMP #713.0-15-15-31-46-n.a @ 1301 MHz (1.350 Volts)	
XMP #814.0-16-16-33-49-n.a @ 1401 MHz (1.350 Volts)	
XMP #915.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1016.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1117.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1218.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1319.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1420.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1521.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1622.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1723.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
XMP #1824.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)	
DIMM #2	
SMBus address0x51	
Memory typeDDR4	
Module formatUDIMM	
Module Manufacturer(ID)Corsair (7F7F9E0000000000000000000000)	
SDRAM Manufacturer (ID)SK Hynix (AD0000000000000000000000000000)	
Size8192 MBytes	
Max bandwidthDDR4-2998 (1499 MHz)	

Max JEDECDDR4-2133 (1066 MHz)	
Part numberCMK16GX4M2B3000C15	
Nominal Voltage1.20 Volts	
EPPno	
XMPYes	rev. 2.0
AMPno	
EXPOno	
JEDEC timings tableCL-tRCD-tRP-tRAS-tRC @ frequency	
JEDEC #19.0-9-10-22-31 @ 666 MHz	
JEDEC #210.0-10-11-25-35 @ 733 MHz	
JEDEC #311.0-11-12-27-38 @ 800 MHz	
JEDEC #412.0-13-13-30-42 @ 900 MHz	
JEDEC #513.0-14-14-32-45 @ 966 MHz	
JEDEC #614.0-14-15-35-49 @ 1033 MHz	
JEDEC #715.0-15-15-36-50 @ 1066 MHz	
JEDEC #816.0-15-15-36-50 @ 1066 MHz	
XMP profileXMP-2998	
SpecificationDDR4-2998	
VDD Voltage1.350 Volts	
Min Cycle time0.667 ns (1499 MHz)	
Max CL15.0	
Min tRP11.33 ns	
Min tRCD11.33 ns	
Min tRAS23.18 ns	
Min tRC34.68 ns	
Min tRRD4.00 ns	
XMP timings tableCL-tRCD-tRP-tRAS-tRC-CR @ frequency (voltage)	
XMP #19.0-11-11-21-32-n.a @ 899 MHz (1.350 Volts)	
XMP #210.0-12-12-24-35-n.a @ 1000 MHz (1.350 Volts)	
XMP #311.0-13-13-26-39-n.a @ 1100 MHz (1.350 Volts)	
XMP #412.0-14-14-28-42-n.a @ 1200 MHz (1.350 Volts)	
XMP #513.0-15-15-31-46-n.a @ 1300 MHz (1.350 Volts)	
XMP #614.0-16-16-33-49-n.a @ 1400 MHz (1.350 Volts)	
XMP #715.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
XMP #816.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
XMP #917.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
XMP #1018.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
XMP #1119.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
XMP #1220.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)	
DIMM #3	
SMBus address0x52	
Memory typeDDR4	
Module formatUDIMM	
Module Manufacturer(ID)Corsair (7F7F9E0000000000000000000000)	
SDRAM Manufacturer (ID)Nanya Technology (7F7F7F0B00000000000000000000)	
Size8192 MBytes	
Max bandwidthDDR4-3002 (1501 MHz)	
Max JEDECDDR4-2133 (1066 MHz)	
Part numberCMK16GX4M2B3000C15	
Nominal Voltage1.20 Volts	
EPPno	
XMPYes	rev. 2.0
AMPno	
EXPOno	
JEDEC timings tableCL-tRCD-tRP-tRAS-tRC @ frequency	
JEDEC #17.0-8-8-18-25 @ 533 MHz	
JEDEC #28.0-9-9-20-28 @ 600 MHz	
JEDEC #39.0-9-9-22-31 @ 666 MHz	
JEDEC #410.0-10-10-25-35 @ 733 MHz	
JEDEC #511.0-11-11-27-38 @ 800 MHz	
JEDEC #612.0-13-13-30-42 @ 900 MHz	
JEDEC #713.0-14-14-32-45 @ 966 MHz	

JEDEC #814.0-14-14-35-49 @ 1033 MHz
JEDEC #915.0-15-15-36-50 @ 1066 MHz
JEDEC #1016.0-15-15-36-50 @ 1066 MHz
JEDEC #1117.0-15-15-36-50 @ 1066 MHz
JEDEC #1218.0-15-15-36-50 @ 1066 MHz
JEDEC #1319.0-15-15-36-50 @ 1066 MHz
JEDEC #1420.0-15-15-36-50 @ 1066 MHz
JEDEC #1521.0-15-15-36-50 @ 1066 MHz
JEDEC #1622.0-15-15-36-50 @ 1066 MHz
JEDEC #1723.0-15-15-36-50 @ 1066 MHz
JEDEC #1824.0-15-15-36-50 @ 1066 MHz
XMP profileXMP-3002
SpecificationDDR4-3002
VDD Voltage1.350 Volts
Min Cycle time0.666 ns (1501 MHz)
Max CL15.0
Min tRP11.32 ns
Min tRCD11.32 ns
Min tRAS23.13 ns
Min tRC34.63 ns
Min tRRD4.00 ns
XMP timings tableCL-tRCD-tRP-tRAS-tRC-CR @ frequency (voltage)
XMP #17.0-8-8-17-25-n.a @ 700 MHz (1.350 Volts)
XMP #28.0-10-10-19-28-n.a @ 800 MHz (1.350 Volts)
XMP #39.0-11-11-21-32-n.a @ 900 MHz (1.350 Volts)
XMP #410.0-12-12-24-35-n.a @ 1001 MHz (1.350 Volts)
XMP #511.0-13-13-26-39-n.a @ 1101 MHz (1.350 Volts)
XMP #612.0-14-14-28-42-n.a @ 1201 MHz (1.350 Volts)
XMP #713.0-15-15-31-46-n.a @ 1301 MHz (1.350 Volts)
XMP #814.0-16-16-33-49-n.a @ 1401 MHz (1.350 Volts)
XMP #915.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1016.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1117.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1218.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1319.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1420.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1521.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1622.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1723.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
XMP #1824.0-17-17-35-52-n.a @ 1501 MHz (1.350 Volts)
DIMM #4
SMBus address0x53
Memory typeDDR4
Module formatUDIMM
Module Manufacturer(ID)Corsair (7F7F9E000000000000000000000000)
SDRAM Manufacturer (ID)SK Hynix (AD0000000000000000000000000000)
Size8192 MBytes
Max bandwidthDDR4-2998 (1499 MHz)
Max JEDECDDR4-2133 (1066 MHz)
Part numberCMK16GX4M2B3000C15
Nominal Voltage1.20 Volts
EPPno
XMPyesrev. 2.0
AMPno
EXPOno
JEDEC timings tableCL-tRCD-tRP-tRAS-tRC @ frequency
JEDEC #19.0-9-10-22-31 @ 666 MHz
JEDEC #210.0-10-11-25-35 @ 733 MHz
JEDEC #311.0-11-12-27-38 @ 800 MHz
JEDEC #412.0-13-13-30-42 @ 900 MHz

JEDEC #513.0-14-14-32-45 @ 966 MHz
JEDEC #614.0-14-15-35-49 @ 1033 MHz
JEDEC #715.0-15-15-36-50 @ 1066 MHz
JEDEC #816.0-15-15-36-50 @ 1066 MHz
XMP profileXMP-2998
SpecificationDDR4-2998
VDD Voltage1.350 Volts
Min Cycle time0.667 ns (1499 MHz)
Max CL15.0
Min tRP11.33 ns
Min tRCD11.33 ns
Min tRAS23.18 ns
Min tRC34.68 ns
Min tRRD4.00 ns
XMP timings tableCL-tRCD-tRP-tRAS-tRC-CR @ frequency (voltage)
XMP #19.0-11-11-21-32-n.a @ 899 MHz (1.350 Volts)
XMP #210.0-12-12-24-35-n.a @ 1000 MHz (1.350 Volts)
XMP #311.0-13-13-26-39-n.a @ 1100 MHz (1.350 Volts)
XMP #412.0-14-14-28-42-n.a @ 1200 MHz (1.350 Volts)
XMP #513.0-15-15-31-46-n.a @ 1300 MHz (1.350 Volts)
XMP #614.0-16-16-33-49-n.a @ 1400 MHz (1.350 Volts)
XMP #715.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
XMP #816.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
XMP #917.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
XMP #1018.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
XMP #1119.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
XMP #1220.0-17-17-35-52-n.a @ 1499 MHz (1.350 Volts)
DIMM #1
SPD registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0023 10 0C 02 85 21 00 08 00 00 00 03 01 03 00 00
1000 00 08 0C FF FF 03 00 6C 6C 6C 11 08 74 F0 0A
2020 08 00 05 00 A8 1E 2B 2B 00 00 00 00 00 00 00
3000 00 00 00 00 00 00 00 00 00 00 00 16 36 16 36
4016 36 16 36 00 00 2B 0C 2B 0C 2B 0C 2B 0C 00 00
5000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7000 00 00 00 00 ED B5 CE 00 00 00 00 00 C2 B6 0D
8011 11 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 B6 58
10000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
11000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
12000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
13000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
14002 9E 00 00 00 00 00 00 00 00 43 4D 4B 31 36 47 58
15034 4D 32 42 33 30 30 30 43 31 35 20 20 00 83 0B
16000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
17000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1800C 4A 01 20 00 00 00 00 00 00 A3 00 00 06 FF FF 03
19000 50 5B 5B 10 BA 16 F0 0A 20 08 00 05 00 B0 20
1A02B 00 00 00 00 00 00 00 00 00 D1 FC 8A CB CB F6 AC
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

1D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
DIMM #2
SPD registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0023 10 0C 02 85 21 00 08 00 00 00 03 01 03 00 00
1000 00 08 0C FC 03 00 00 6C 6C 71 11 08 74 F0 0A
2020 08 00 05 00 A8 1E 2B 2B 00 00 00 00 00 00 00
3000 00 00 00 00 00 00 00 00 00 00 00 16 36 16 36
4016 36 16 36 00 00 2B 0C 2B 0C 2B 0C 2B 0C 00 00
5000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7000 00 00 00 00 ED B5 CF 00 C0 00 00 00 C2 ED 51
8011 11 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 00 00 00 00 00 00 B6 58
10000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
11000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
12000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
13000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
14002 9E 00 00 00 00 00 00 00 43 4D 4B 31 36 47 58
15034 4D 32 42 33 30 30 30 43 31 35 20 20 00 80 AD
16000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
17000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1800C 4A 01 20 00 00 00 00 00 A3 00 00 06 FC 3F 04
19000 50 5B 5B 10 BA 16 F0 0A 20 08 00 05 00 B0 20
1A02B 00 00 00 00 00 00 00 00 D3 00 BA D3 D3 00 AD
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
DIMM #3
SPD registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0023 10 0C 02 85 21 00 08 00 00 00 03 01 03 00 00
1000 00 08 0C FF FF 03 00 6C 6C 6C 11 08 74 F0 0A
2020 08 00 05 00 A8 1E 2B 2B 00 00 00 00 00 00 00
3000 00 00 00 00 00 00 00 00 00 00 00 16 36 16 36
4016 36 16 36 00 00 2B 0C 2B 0C 2B 0C 2B 0C 00 00
5000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7000 00 00 00 00 ED B5 CE 00 00 00 00 00 C2 B6 0D
8011 11 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

F000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 B6 58	
10000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
11000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
12000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
13000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
14002	9E 00 00 00 00 00 00 00 00 00 43 4D
4B 31 36 47 58	
15034	4D 32 42 33 30 30 30 43 31 35
20 20 00 83 0B	
16000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
17000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1800C	4A 01 20 00 00 00 00 00 A3 00
00 06 FF FF 03	
19000	50 5B 5B 10 BA 16 F0 0A 20 08
00 05 00 B0 20	
1A02B	00 00 00 00 00 00 00 00 D1 FC
8A CB CB F6 AC	
1B000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1C000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1D000	00 00
1E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1F000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
DIMM #4	
SPD registers	
00 01 02 03 04 05 06 07 08 09 0A 0B 0C	
0D 0E 0F	
0023	10 0C 02 85 21 00 08 00 00 00 03
01 03 00 00	
1000	00 08 0C FC 03 00 00 6C 6C 71 11
08 74 F0 0A	
2020	08 00 05 00 A8 1E 2B 2B 00 00 00
00 00 00 00	
3000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 16 36 16 36
4016	36 16 36 00 00 2B 0C 2B 0C 2B 0C
2B 0C 00 00	
5000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
6000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7000	00 00 00 00 ED B5 CF 00 C0 00 00
00 C2 ED 51	
8011	11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 B6 58
10000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
11000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
12000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
13000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
14002	9E 00 00 00 00 00 00 00 00 00 43 4D
4B 31 36 47 58	
15034	4D 32 42 33 30 30 30 43 31 35
20 20 00 80 AD	
16000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
17000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1800C	4A 01 20 00 00 00 00 00 A3 00
00 06 FC 3F 04	
19000	50 5B 5B 10 BA 16 F0 0A 20 08
00 05 00 B0 20	
1A02B	00 00 00 00 00 00 00 00 D3 00
BA D3 D3 00 AD	
1B000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1C000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1D000	00 00
1E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1F000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Monitoring	
----- -----	
Mainboard ModelZ370 KRAIT GAMING (MS-7B46) (0x00000683 - 0xCA9435F4) LPCIO	

-----		
-----		
LPCIO VendorNuvoton		
LPCIO ModelNCT6795		
LPCIO Vendor ID0x5CA3		
LPCIO Chip ID0xD3		
LPCIO Revision ID0x52		
Config Mode I/O address0x4E		
Config Mode LDN0xB		
Config Mode registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
00FF FF 00 FF FF FF 0B FF FF FF FF FF		
FF FF FF		
10FF FF FF FF FF FF FF FF FF 30 C6 10		
00 FF FF		
20D3 52 FF 00 00 00 40 03 00 FF 58 00		
00 00 00 18		
3001 FF FF FF FF FF FF FF FF FF FF FF		
FF FF FF		
40FF FF FF FF FF FF FF FF FF FF FF FF		
FF FF FF		
50FF FF FF FF FF FF FF FF FF FF FF FF		
FF FF FF		
600A 20 0A 30 00 00 FF FF FF FF FF FF		
FF FF FF FF		
7000 FF FF FF FF FF FF FF FF FF FF FF		
FF FF FF		
Register spaceLPC	base address = 0x0A20	
Hardware Monitors		
-----		
-----		
Hardware monitorNuvoton NCT6795		
Voltage 23.34 Volts [0xD1] (AVCC)		
Voltage 33.36 Volts [0xD2] (3VCC)		
Voltage 71.33 Volts [0xA6] (System Agent)		
Voltage 81.27 Volts [0x9F] (CPU VCORE)		
Voltage 91.41 Volts [0x58] (DRAM)		
Voltage 1011.90 Volts [0x7C] (+12V)		
Voltage 115.08 Volts [0x7F] (+5V)		
Voltage 121.27 Volts [0x9F] (IO Voltage)		
Voltage 131.00 Volts [0x7D] (PCH Voltage)		
Voltage 140.11 Volts [0xE] (GT Voltage)		
Temperature 031 degC (87 degF) [0x1F] (SYSTIN)		
Temperature 142 degC (106 degF) [0x53] (CPUTIN)		
Temperature 349 degC (120 degF) [0x31] (TMPIN3)		
Temperature 541 degC (105 degF) [0x29] (TMPIN5)		
Temperature 631 degC (87 degF) [0x1F] (System)		
Fan 12191 RPM [0x88F] (CPU)		
Fan 21247 RPM [0x4DF] (System #1)		
Fan 31299 RPM [0x513] (System #2)		
Fan 41272 RPM [0x4F8] (System #3)		
Fan 51268 RPM [0x4F4] (System #4)		
Hardware registers		
Register spaceLPC	base address = 0x0A20	
bank 0		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0003 4A 03 D2 00 FF FF FF FF FF FF FF		
FF FF FF FF		
1003 F4 03 F4 03 F4 03 F4 40 84 A6 0A		
7D 58 BE 00		
20A1 7F D1 D3 7C 12 9F 1F FF FF FF DA		
00 00 00 00		
3000 00 00 00 00 00 00 00 00 00 00 FF		
FF FF FF FF		
4023 00 07 DF DF 00 2F FF 2D FF FF 10		
00 55 00 A3		
5005 FF FF FF FF FF FF FF C1 FF FF FF FF		
02 02 00		
6053 F0 FF FF FF 01 00 FF FF FF FF FF FF		
FF FF FF		
7000 0A 00 35 00 35 00 35 00 35 00 35		
00 35 00 FF		
80FF 7F 3F BF FF 05 05 05 00 00 00 00		
00 00 00 00		
900A 00 00 00 00 00 FD FD FD 0A 95 EF 80		
FF 40 46 C4		
A00E FF 00 00 FF 00 00 FF 00 00 80 66		
06 06 01 00		
B000 00 00 00 00 00 29 00 04 00 00 08		
34 80 04 00		
C0FF FF FF FF FF FF FF FF FF 08 01 05 FF		
FF FF FF		
D005 05 05 05 00 00 00 00 00 00 00 00		
FD FD FD FD		



E055 80 00 00 00 FF FF FF FF 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 FF 1C 00 4A 00 B7 FF FF FF
bank 4
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0000 00 00 00 00 00 00 00 00 00 00 00 00 FF FF FF
10FF FF FF FF FF FF FF FF FF 00 00 FF FF FF FF
20FF FF FF 96 64 96 64 E1 96 00 FF FF FF FF FF
30FF FF FF FF FF FF FF FF FF FF FF FF FF FF
40FF FF 00 00 FF FF FF FF FF FF 00 00 00 00 04 FF
5001 F3 FF FF 00 00 00 FF FF 1E 13 31 09 00 FF FF
60FF 01 00 00 00 00 00 00 FF FF FF FF FF FF FF
70FF FF FF FF FF FF FF FF FF FF FF FF FF FF
80A1 7F D1 D3 7C 12 9F D1 00 84 A6 01 7D 58 BE 00
901F 29 0C 09 7F FF 00 2A 00 36 36 36 36 00 36
A0FF 1F FF FF FF FF 5B E7 F4 F4 F4 00 00 00 00 00
B0FF 1F 13 10 22 19 21 14 21 05 21 02 00 F4 FF FF
C000 00 08 73 04 BC 04 E6 04 F8 04 FB FF FF FF
D000 00 00 00 00 00 FF FF FF FF FF FF FF FF
E050 D8 F4 F4 F4 F4 FF FF FF FF FF FF FF FF
F036 80 00 00 36 00 00 00 00 00 00 00 00 00 00
Hardware monitorIntel I/O
Clock Speed 00.00 MHz [0x0] (Graphics)
Clock Speed 1n.a. (Memory)
Clock Speed 2n.a. (Processor)
Hardware monitorNVIDIA NVML
Power 0124.73 W (GPU)
Hardware monitorNVIDIA NVAPI
Power 0124.73 W (GPU)
Clock Speed 01320.00 MHz [0x528] (Graphics)
Clock Speed 16120.98 MHz [0x17E8] (Memory)
Clock Speed 2n.a. (Processor)
PCI Devices
-----
-----
Register spacePCI Express
DescriptionHost Bridge
Locationbus 0 (0x00)
device 0 (0x00)
function 0 (0x00)
Common header
Vendor ID0x8086 (Intel)
Model ID0x3EC2
Revision ID0x0D
PI0x00
SubClass0x00
BaseClass0x06
Cache Line0x00
Latency0x00
Header0x00
PCI header
Subvendor ID0x1462 (MSI)
Subsystem ID0x7B46
Int. Line0x00
Int. Pin0x00
PCI capability
Caps classVendor Dependant
Caps offset0xE0
PCI registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0086 80 C2 3E 06 00 90 20 0D 00 00 06 00 00 00 00
1000 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2000 00 00 00 00 00 00 00 00 00 00 00 00 00 00
62 14 46 7B
3000 00 00 00 E0 00 00 00 00 00 00 00 00 00 00
4001 90 D1 FE 00 00 00 00 01 00 D1 FE 00 00 00 00
50C3 02 00 00 39 80 00 00 47 00 F0 7F 01 00 00 7B
6001 00 00 E0 00 00 00 00 01 80 D1 FE 00 00 00 00
7000 00 00 FF 07 00 00 00 00 0C 00 FF 7F 00 00 00
8011 11 11 11 11 11 11 00 1A 00 00 00 00 00 00 00
9001 00 00 FF 07 00 00 00 01 00 F0 7E 08 00 00 00
A001 00 00 00 08 00 00 00 01 00 00 7F 08 00 00 00

B001 00 00 7C 01 00 80 7B 01 00 00 7B 01 00 00 80
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E009 00 10 01 DD 20 01 62 C8 00 E4 A4 00 C0 02 00
F000 00 00 00 C8 0F 0D 00 00 00 00 00 00 00 00 00
DescriptionPCI to PCI Bridge
Locationbus 0 (0x00)device 1 (0x01)function 0 (0x00)
Common header
Vendor ID0x8086 (Intel)
Model ID0x1901
Revision ID0x0D
PI0x00
SubClass0x04
BaseClass0x06
Cache Line0x10
Latency0x00
Header0x81
PCI header
Primary bus0x00
Secondary bus0x01
Int. Line0x0B
Int. Pin0x01
PCI capability
Caps classSubsystem Vendor
Caps offset0x88
SubVendor ID0x1462 (MSI)
SubSystem ID0x7B46
PCI capability
Caps classPower Management
Caps offset0x80
Caps version1.2
PCI capability
Caps classMessage Signalled Interrupts
Caps offset0x90
PCI capability
Caps classPCI Express
Caps offset0xA0
Device typeRoot Port of PCI-E Root Complex
Port2
Caps version2.0
Physical slot#0
Presence detectyes
Link width16x (max 16x)
Link speed8.0 GT/s (max 8.0 GT/s)
PCI extended capability
Caps classVirtual Channel
Caps offset0x100
PCI extended capability
Caps classRoot Complex Link Declaration
Caps offset0x140
Link Entries #1
Port Number2
PCI extended capability
Caps classSecondary PCI Express
Caps offset0xD94
PCI registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0086 80 01 19 07 04 10 00 0D 00 04 06 10 00 81 00
1000 00 00 00 00 00 00 00 01 01 00 E0 E0 00 20
2000 DE 00 DF 01 C0 01 D2 00 00 00 00 00 00 00 00
3000 00 00 00 88 00 00 00 00 00 00 00 0B 01 18 00
4000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
5000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7000 00 00 00 00 00 00 00 62 17 00 00 00 00 0A
8001 90 03 C8 08 00 00 00 0D 80 00 00 62 14 46 7B
9005 A0 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A010 00 42 01 01 80 00 00 00 00 00 00 03 AD 61 02
B040 00 03 D1 80 25 0C 00 00 00 48 00 00 00 00 00
C000 00 00 00 80 0B 08 00 00 64 00 00 0E 00 00 00
D043 00 1E 00 00 00 00 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000 60 01 C0 4E 01 01 20 00 00 00 00 E0 00 10 00
10002 00 01 14 00 00 00 00 00 00 00 00 00 00 00 00
11001 00 00 00 FF 00 00 80 00 00 00 00 00 00 00 00

12000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
13000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
14005	00 41 D9 00 01 01 02 00 00 00
00 00 00 00 00	
15001	00 01 00 00 00 00 00 00 00 90 D1 FE
00 00 00 00	
16000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
17000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
18000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
19000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1A000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1B000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1C001	00 41 D9 00 00 00 00 00 00 00 00
00 10 40 06 00	
1D000	00 00 00 00 00 20 00 00 00 00 00 00
00 00 00 00 00	
1E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1F000	00 00 00 00 00 00 00 00 00 08 01 04
00 00 00 7C	
DescriptionDisplay Controller	
Locationbus 0 (0x00)	device 2 (0x02)function 0 (0x00)
Common header	
Vendor ID0x8086 (Intel)	
Model ID0x3E98	
Revision ID0x02	
PIOx00	
SubClass0x80	
BaseClass0x03	
Cache Line0x10	
Latency0x00	
Header0x00	
PCI header	
Address 0 (memory)0x00000000DD000004	
Address 2 (memory)0x00000000B000000C	
Address 4 (port)0x0000FEC0	
Subvendor ID0x1462 (MSI)	
Subsystem ID0x7B46	
Int. Line0x00	
Int. Pin0x01	
PCI capability	
Caps classVendor Dependant	
Caps offset0x40	
PCI capability	
Caps classPCI Express	
Caps offset0x70	
Device typeRoot Complex Integrated	
Endpoint Device	
Port0	
Caps version2.0	
PCI capability	
Caps classMessage Signalled	
Interrupts	
Caps offset0xAC	
PCI capability	
Caps classPower Management	
Caps offset0xD0	
Caps version1.1	
PCI extended capability	
Caps class0x1B	
Caps offset0x100	
PCI extended capability	
Caps class0xF	
Caps offset0x200	
PCI extended capability	
Caps class0x13	
Caps offset0x300	
PCI registers	
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F	
0086 80 98 3E 07 04 10 00 02 00 80 03 10 00 00 00	
1004 00 00 DD 00 00 00 00 0C 00 00 B0 00 00 00 00	
20C1 FE 00 00 00 00 00 00 00 00 00 00 62 14 46 7B	
3000 00 00 00 40 00 00 00 00 00 00 00 00 01 00 00	
4009 70 0C 01 DD 20 01 62 C8 00 E4 A4 00 00 00 00	
50C3 02 00 00 39 80 00 00 00 00 00 00 01 00 00 7C	
6000 00 01 01 00 00 00 00 00 00 00 00 00 00 00 00	
7010 AC 92 00 00 80 00 10 00 00 00 00 00 00 00 00	
8000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
A000 00 00 00 00 00 00 00 00 00 00 00 05 D0 01 00	
B0B0 02 E0 FE 00 00 00 00 00 00 00 00 00 00 00 00	

C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D001 00 22 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 80 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 00 00 00 00 00		
18 90 AF 79		
1001B 00 01 20 00 14 00 00 00 00 00 00 00		
00 00 00 00		
11000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
13000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
14000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
15000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
16000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1D000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionSystem Device		
Locationbus 0 (0x00)	device 8 (0x08)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0x1911		
Revision ID0x00		
PIOx00		
SubClass0x80		
BaseClass0x08		
Cache Line0x10		
Latency0x00		
Header0x00		
PCI header		
Address 0 (memory)0x00000000DF44F004		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x0B		
Int. Pin0x01		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x90		
PCI capability		
Caps classPower Management		
Caps offset0xDC		
Caps version1.1		
PCI capability		
Caps class0x13		
Caps offset0xF0		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 11 19 00 00 10 00 00 00 80 08		
10 00 00 00		
1004 F0 44 DF 00 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00 00		
62 14 46 7B		
3000 00 00 00 00 90 00 00 00 00 00 00 00		
0B 01 00 00		
40FF 01 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
5000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
7000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
9005 DC 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
A000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00 00		
01 F0 02 00		
E000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F013 00 06 03 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionUSB Controller (xHCI)		

Locationbus 0 (0x00)	device 20 (0x14)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2AF		
Revision ID0x00		
PI0x30		
SubClass0x03		
BaseClass0x0C		
Cache Line0x00		
Latency0x00		
Header0x80		
PCI header		
Address 0 (memory)0x00000000DF430004		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x01		
PCI capability		
Caps classPower Management		
Caps offset0x70		
Caps version1.1		
PCI capability		
Caps classMessage Signalled Interrupts		
Caps offset0x80		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F		
0086 80 AF A2 06 04 90 02 00 30 03 0C 00 00 80 00		
1004 00 43 DF 00 00 00 00 00 00 00 00 00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00 62 14 46 7B		
3000 00 00 00 70 00 00 00 00 00 00 00 00 01 00 00		
40FD 01 34 80 88 C6 0F 80 00 00 00 00 00 00 00 00		
505B 6E CE 0F 00 00 00 00 00 00 00 00 00 00 00 00		
6030 60 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
7001 80 C2 C1 08 00 00 00 00 00 00 00 00 00 00 00		
8005 00 87 00 90 01 E0 FE 00 00 00 00 00 00 00 00		
9009 00 14 F0 10 00 40 01 00 00 00 00 C1 0A 08 00		
A000 08 00 00 00 18 00 00 8F 40 02 00 00 01 04 00		
B003 C0 00 00 0C 00 00 00 30 00 00 00 C0 00 00 00		
C000 03 00 00 00 0C 00 00 00 10 00 00 00 00 00 00		
D003 00 00 00 0C 00 00 00 30 00 00 00 00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
F000 00 00 00 00 00 00 00 B3 0F 00 08 00 00 00 00		
DescriptionData Aquisition and Signal Processing Device		
Locationbus 0 (0x00)	device 20 (0x14)	function 2 (0x02)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2B1		
Revision ID0x00		
PI0x00		
SubClass0x80		
BaseClass0x11		
Cache Line0x00		
Latency0x00		
Header0x00		
PCI header		
Address 0 (memory)0x00000000DF44E004		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x0B		
Int. Pin0x03		
PCI capability		
Caps classPower Management		
Caps offset0x50		
Caps version1.2		
PCI capability		
Caps classMessage Signalled Interrupts		
Caps offset0x80		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F		
0086 80 B1 A2 02 00 10 00 00 00 80 11 00 00 00 00		
1004 E0 44 DF 00 00 00 00 00 00 00 00 00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00 62 14 46 7B		
3000 00 00 00 50 00 00 00 00 00 00 00 0B 03 00 00		
4004 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
5001 80 23 00 08 00 00 00 00 00 00 00 00 00 00 00		

6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
7000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8005 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 00 B3 0F 00 08		
00 00 00 00		
DescriptionCommunication Device		
Locationbus 0 (0x00)	device 22 (0x16)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2BA		
Revision ID0x00		
PI0x00		
SubClass0x80		
BaseClass0x07		
Cache Line0x00		
Latency0x00		
Header0x80		
PCI header		
Address 0		
(memory)0x00000000FE7FF004		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x01		
PCI capability		
Caps classPower Management		
Caps offset0x50		
Caps version1.2		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x8C		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 BA A2 06 04 10 00 00 00 80 07		
00 00 80 00		
1004 F0 7F FE 00 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00 00 00		
62 14 46 7B		
3000 00 00 00 00 50 00 00 00 00 00 00 00 00		
00 01 00 00		
4055 02 00 90 10 00 01 80 06 05 F1 00		
00 00 00 00		
5001 8C 03 40 08 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6020 00 00 00 04 40 08 00 00 00 00 00 00 00		
02 00 00 00		
7000 00 00 00 00 00 00 00 E0 00 00 00 00 00		
00 00 00 00		
8000 00 00 00 00 00 00 00 00 00 00 00 00 00		
05 00 81 00		
90D0 02 E0 FE 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
A000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 40		
C000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 B3 0F 00 08		
00 00 00 00		
DescriptionSerial ATA Controller - AHCI		
Locationbus 0 (0x00)	device 23 (0x17)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA282		
Revision ID0x00		
PI0x01		
SubClass0x06		
BaseClass0x01		
Cache Line0x00		
Latency0x00		
Header0x00		
PCI header		
Address 0 (memory)0xDF448000		
Address 1 (memory)0xDF44C000		
Address 2 (port)0x0000F090		
Address 3 (port)0x0000F080		
Address 4 (port)0x0000F060		
Address 5 (memory)0xDF44B000		
Subvendor ID0x1462 (MSI)		

Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x01		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x80		
PCI capability		
Caps classPower Management		
Caps offset0x70		
Caps version1.2		
PCI capability		
Caps classSerial ATA Configuration		
Caps offset0xA8		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 82 A2 07 04 B0 02 00 01 06 01		
00 00 00 00		
1000 80 44 DF 00 C0 44 DF 91 F0 00 00		
81 F0 00 00		
2061 F0 00 00 00 B0 44 DF 00 00 00 00		
62 14 46 7B		
3000 00 00 00 80 00 00 00 00 00 00 00		
00 01 00 00		
4000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
5000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
7001 A8 03 40 08 00 00 00 00 00 00 00		
00 00 00 00		
8005 70 01 00 30 00 E0 FE 00 00 00 00		
00 00 00 00		
9000 00 FE 00 01 00 01 00 00 00 00 00		
30 00 00 80		
A03C 00 00 00 00 00 00 00 12 00 10 00		
48 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D011 00 00 00 00 00 00 00 01 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 B3 0F 00 08		
00 00 00 00		
DescriptionPCI to PCI Bridge		
Locationbus 0 (0x00)	device 28 (0x1C)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA290		
Revision ID0xF0		
PI0x00		
SubClass0x04		
BaseClass0x06		
Cache Line0x10		
Latency0x00		
Header0x81		
PCI header		
Primary bus0x00		
Secondary bus0x02		
Int. Line0x0B		
Int. Pin0x01		
PCI capability		
Caps classPCI Express		
Caps offset0x40		
Device typeRoot Port of PCI-E Root		
Complex		
Port1		
Caps version2.0		
Physical slotIntegrated device		
Link width0x (max 1x)		
Link speed2.5 GT/s (max 8.0 GT/s)		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x80		
PCI capability		
Caps classSubsystem Vendor		
Caps offset0x90		
SubVendor ID0x1462 (MSI)		
SubSystem ID0x7B46		
PCI capability		
Caps classPower Management		
Caps offset0xA0		
Caps version1.2		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 90 A2 04 04 10 00 F0 00 04 06		
10 00 81 00		
1000 00 00 00 00 00 00 00 02 02 00		
F0 00 00 20		
20F0 FF 00 00 F1 FF 01 00 00 00 00 00		
00 00 00 00		
3000 00 00 00 40 00 00 00 00 00 00 00		
0B 01 00 00		

4010 80 42 00 01 80 00 00 00 00 10 00
13 7C 71 01
5000 00 01 10 60 00 04 00 00 00 40 00
00 00 00 00
6000 00 00 00 37 08 08 00 00 00 00 00
0E 00 00 00
7001 00 01 00 00 00 00 00 00 00 00 00
00 00 00 00
8005 90 00 00 00 00 00 00 00 00 00 00
00 00 00 00
900D A0 00 00 62 14 46 7B 00 00 00 00
00 00 00 00
A001 00 03 C8 00 00 00 00 00 00 00 00
00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
C000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
D011 00 00 07 00 08 00 00 02 00 9E 09
00 00 00 00
E000 F7 91 00 00 00 00 00 04 80 02 00
00 00 00 00
F050 01 00 00 00 F3 00 40 B3 0F 00 08
00 00 00 01
10000 00 00 00 00 00 00 00 00 00 00 00
11 00 06 00
11000 00 00 00 00 20 00 00 00 00 00 00
00 00 00 00
12000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
13000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
14000 00 00 00 0F 00 00 00 00 00 00 00
00 00 00 00
15000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
16000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
17000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
18000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
19000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1A000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1B000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1C000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1D000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00
1E000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
1F000 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

Description	PCI to PCI Bridge		
Location	bus 0 (0x00)	device 28 (0x1C)	function 4 (0x04)
Common header			
Vendor ID0x8086 (Intel)			
Model ID0xA294			
Revision ID0xF0			
PI0x00			
SubClass0x04			
BaseClass0x06			
Cache Line0x10			
Latency0x00			
Header0x81			
PCI header			
Primary bus0x00			
Secondary bus0x03			
Int. Line0x0B			
Int. Pin0x01			
PCI capability			
Caps classPCI Express			
Caps offset0x40			
Device typeRoot Port of PCI-E Root Complex			
Port5			
Caps version2.0			
Physical slot#1			
Presence detectyes			
Link width2x (max 2x)			
Link speed8.0 GT/s (max 8.0 GT/s)			
PCI capability			
Caps classMessage Signalled Interrupts			
Caps offset0x80			
PCI capability			
Caps classSubsystem Vendor			
Caps offset0x90			
SubVendor ID0x1462 (MSI)			
SubSystem ID0x7B46			
PCI capability			
Caps classPower Management			
Caps offset0xA0			
Caps version1.2			
PCI extended capability			
Caps classAdvanced Error Reporting			
Caps offset0x100			
PCI extended capability			
Caps class0xD			
Caps offset0x140			



PCI extended capability			
Caps classSecondary PCI Express			
Caps offset0x220			
PCI registers			
00 01 02 03 04 05 06 07 08 09 0A 0B 0C			
0D 0E 0F			
0086 80 94 A2 06 04 10 00 F0 00 04 06			
10 00 81 00			
1000 00 00 00 00 00 00 00 03 03 00			
F0 00 00 20			
2030 DF 30 DF F1 FF 01 00 00 00 00 00			
00 00 00 00			
3000 00 00 00 40 00 00 00 00 00 00 00			
0B 01 00 00			
4010 80 42 01 01 80 00 00 20 00 10 00			
23 40 72 05			
5040 00 23 70 00 FD 44 00 00 00 48 01			
00 00 00 00			
6000 00 00 00 37 08 00 00 00 04 00 00			
0E 00 00 00			
7003 00 1F 00 00 00 00 00 00 00 00 00			
00 00 00 00			
8005 90 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
900D A0 00 00 62 14 46 7B 00 00 00 00			
00 00 00 00			
A001 00 03 C8 00 00 00 00 00 00 00 00			
00 00 00 00			
B000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
C000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
D011 10 00 07 42 18 00 00 08 00 9E 89			
00 00 00 00			
E000 B7 F3 00 50 88 50 88 16 80 12 00			
00 00 00 00			
F050 01 00 00 00 03 00 40 B3 0F 00 08			
00 40 00 01			
10001 00 01 14 00 00 00 00 00 00 01 00			
11 00 06 00			
11000 00 00 00 00 20 00 00 00 00 00 00			
00 00 00 00			
12000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
13000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1400D 00 01 22 0F 00 00 00 00 00 00 00			
00 00 00 00			
15000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
16000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
17000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
18000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
19000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1A000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1B000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1C000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1D000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00 00			
1E000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
1F000 00 00 00 00 00 00 00 00 00 00 00			
00 00 00 00			
DescriptionPCI to PCI Bridge			
Locationbus 0 (0x00)	device 28 (0x1C)	function 6 (0x06)	
Common header			
Vendor ID0x8086 (Intel)			
Model ID0xA296			
Revision ID0xF0			
PI0x00			
SubClass0x04			
BaseClass0x06			
Cache Line0x10			
Latency0x00			
Header0x81			
PCI header			
Primary bus0x00			
Secondary bus0x04			
Int. Line0x0B			
Int. Pin0x03			
PCI capability			
Caps classPCI Express			
Caps offset0x40			
Device typeRoot Port of PCI-E Root			
Complex			
Port7			
Caps version2.0			
Physical slot#1			
Presence detectyes			
Link width1x (max 1x)			
Link speed2.5 GT/s (max 8.0 GT/s)			
PCI capability			
Caps classMessage Signalled			
Interrupts			
Caps offset0x80			
PCI capability			
Caps classSubsystem Vendor			
Caps offset0x90			

SubVendor ID0x1462 (MSI)		
SubSystem ID0x7B46		
PCI capability		
Caps classPower Management		
Caps offset0xA0		
Caps version1.2		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI extended capability		
Caps class0xD		
Caps offset0x140		
PCI extended capability		
Caps classSecondary PCI Express		
Caps offset0x220		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 96 A2 06 04 10 00 F0 00 04 06		
10 00 81 00		
1000 00 00 00 00 00 00 00 04 04 00		
F0 00 00 20		
2020 DF 20 DF F1 FF 01 00 00 00 00 00		
00 00 00 00		
3000 00 00 00 40 00 00 00 00 00 00		
0B 03 00 00		
4010 80 42 01 01 80 00 00 00 00 10 00		
13 40 72 07		
5040 00 11 70 00 B2 54 00 00 00 40 01		
00 00 00 00		
6000 00 00 00 37 08 00 00 00 04 00 00		
0E 00 00 00		
7003 00 01 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8005 90 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
900D A0 00 00 62 14 46 7B 00 00 00 00		
00 00 00 00		
A001 00 03 C8 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D001 10 00 07 42 18 00 00 08 00 9E 89		
00 00 00 00		
E000 03 E3 00 00 00 00 00 06 00 10 00		
00 00 00 00		
F050 01 00 00 00 00 00 4C B3 0F 00 08		
00 00 00 03		
10001 00 01 14 00 00 00 00 00 01 00		
11 00 06 00		
11000 00 00 00 00 20 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
13000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1400D 00 01 22 0F 00 00 00 00 00 00 00		
00 00 00 00		
15000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
16000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionPCI to PCI Bridge		
Locationbus 0 (0x00)	device 29 (0x1D)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA298		
Revision ID0xF0		
PI0x00		
SubClass0x04		
BaseClass0x06		
Cache Line0x10		
Latency0x00		
Header0x81		
PCI header		
Primary bus0x00		
Secondary bus0x05		
Int. Line0x0B		
Int. Pin0x01		
PCI capability		
Caps classPCI Express		
Caps offset0x40		
Device typeRoot Port of PCI-E Root		
Complex		

Port9		
Caps version2.0		
Physical slot#1		
Presence detectyes		
Link width4x (max 4x)		
Link speed8.0 GT/s (max 8.0 GT/s)		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x80		
PCI capability		
Caps classSubsystem Vendor		
Caps offset0x90		
SubVendor ID0x1462 (MSI)		
SubSystem ID0x7B46		
PCI capability		
Caps classPower Management		
Caps offset0xA0		
Caps version1.2		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI extended capability		
Caps class0xD		
Caps offset0x140		
PCI extended capability		
Caps classSecondary PCI Express		
Caps offset0x220		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 98 A2 06 04 10 00 F0 00 04 06		
10 00 81 00		
1000 00 00 00 00 00 00 00 00 05 05 00		
F0 00 00 20		
2010 DF 10 DF F1 FF 01 00 00 00 00 00		
00 00 00 00		
3000 00 00 00 40 00 00 00 00 00 00 00		
0B 01 00 00		
4010 80 42 01 01 80 00 00 20 00 10 00		
43 40 72 09		
5040 00 43 70 00 FD 64 00 00 00 40 01		
00 00 00 00		
6000 00 00 00 37 08 00 00 00 04 00 00		
0E 00 00 00		
7003 00 1F 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8005 90 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
900D A0 00 00 62 14 46 7B 00 00 00 00		
00 00 00 00		
A001 00 03 C8 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D011 10 00 07 42 18 00 00 08 00 9E 89		
00 00 00 00		
E000 B7 F3 00 F4 09 F4 09 16 80 12 00		
00 00 00 00		
F050 01 00 00 00 03 00 40 B3 0F 00 08		
00 C0 00 01		
10001 00 01 14 00 00 00 00 00 00 01 00		
11 00 06 00		
11000 00 00 00 00 20 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
13000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1400D 00 01 22 0F 00 00 00 00 00 00 00		
00 00 00 00		
15000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
16000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionPCI to ISA Bridge		
Locationbus 0 (0x00)	device 31 (0x1F)	function 0 (0x00)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2C9		
Revision ID0x00		
PI0x00		

SubClass0x01		
BaseClass0x06		
Cache Line0x00		
Latency0x00		
Header0x80		
PCI header		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x00		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 C9 A2 07 00 00 02 00 00 01 06		
00 00 80 00		
1000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00		
62 14 46 7B		
3000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
4000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
5000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6000 00 00 00 00 D0 00 00 00 00 00 00 00		
00 00 00 00		
7000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8070 00 0E 3F 01 02 FC 00 01 0A 3C 00		
E1 03 0C 00		
90E1 02 1C 00 00 00 00 00 00 00 00 00		
00 00 00 00		
A000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D033 22 11 00 67 45 00 00 CF FF 00 00		
80 00 00 00		
E0C0 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 B3 0F 00 08		
00 00 00 00		
DescriptionMemory Controller		
Locationbus 0 (0x00)	device 31 (0x1F)	function 2 (0x02)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2A1		
Revision ID0x00		
PI0x00		
SubClass0x80		
BaseClass0x05		
Cache Line0x00		
Latency0x00		
Header0x80		
PCI header		
Address 0 (memory)0xDF444000		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x00		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
0086 80 A1 A2 06 00 00 00 00 00 80 05		
00 00 80 00		
1000 40 44 DF 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00		
62 14 46 7B		
3000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
4001 18 00 00 80 01 00 00 00 00 00 FE		
00 00 00 00		
5000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
7000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
8000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
9000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
A0F0 36 80 D8 48 38 06 00 00 46 00 00		
00 00 00 01		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 B3 0F 00 08		
00 00 00 00		
DescriptionHigh Definition Audio (HDA)		
Locationbus 0 (0x00)	device 31 (0x1F)	function 3 (0x03)
Common header		
Vendor ID0x8086 (Intel)		
Model ID0xA2F0		
Revision ID0x00		
PI0x00		
SubClass0x03		

BaseClass0x04
Cache Line0x10
Latency0x20
Header0x00
PCI header
Address 0 (memory)0x00000000DF440004
Address 4 (memory)0x00000000DF420004
Subvendor ID0x1462 (MSI)
Subsystem ID0xCB46
Int. Line0x10
Int. Pin0x01
PCI capability
Caps classPower Management
Caps offset0x50
Caps version1.2
PCI capability
Caps classMessage Signalled
Interrupts
Caps offset0x60
PCI registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0086 80 F0 A2 06 00 10 00 00 00 03 04 10 20 00 00
1004 00 44 DF 00 00 00 00 00 00 00 00 00 00 00 00
2004 00 42 DF 00 00 00 00 00 00 00 00 62 14 46 CB
3000 00 00 00 50 00 00 00 00 00 00 00 10 01 00 00
4000 00 00 00 00 00 00 00 FF 0D 3B 80 00 00 00 00
5001 60 43 C0 08 00 00 00 00 00 00 00 00 00 00 00
6005 00 80 00 00 00 00 00 00 00 00 00 00 00 00 00
7010 00 91 00 00 00 00 10 00 28 10 00 00 00 00 00
8000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C008 06 02 00 00 70 80 04 00 0C A5 82 10 00 03 00
D000 0C B5 02 10 00 03 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 B3 0F 00 08 00 00 00 00
DescriptionSMBus Controller
Locationbus 0 (0x00)device 31 (0x1F)function 4 (0x04)
Common header
Vendor ID0x8086 (Intel)
Model ID0xA2A3
Revision ID0x00
PI0x00
SubClass0x05
BaseClass0x0C
Cache Line0x00
Latency0x00
Header0x00
PCI header
Address 0 (memory)0x00000000DF44A004
Address 4 (port)0x0000F040
Subvendor ID0x1462 (MSI)
Subsystem ID0x7B46
Int. Line0x0B
Int. Pin0x01
PCI registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0086 80 A3 A2 03 00 80 02 00 00 05 0C 00 00 00 00
1004 A0 44 DF 00 00 00 00 00 00 00 00 00 00 00 00
2041 F0 00 00 00 00 00 00 00 00 00 00 62 14 46 7B
3000 00 00 00 00 00 00 00 00 00 00 00 0B 01 00 00
4001 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
5001 04 00 00 01 01 00 00 00 00 00 00 00 00 00 00
6004 05 05 00 00 00 0A 0A 00 00 00 00 00 00 00 00
7000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
8024 00 04 00 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

C000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
D000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
F000	00 00 00 00 00 00 00 00 00 B3 0F 00 08
00 00 00 00	
Description	Ethernet Controller
Location	bus 0 (0x00)device 31 (0x1F)function 6 (0x06)
Common header	
Vendor ID	0x8086 (Intel)
Model ID	0x15B8
Revision ID	0x00
PIOx00	
SubClass	0x00
BaseClass	0x02
Cache Line	0x00
Latency	0x00
Header	0x00
PCI header	
Address 0 (memory)	0xDF400000
Subvendor ID	0x1462 (MSI)
Subsystem ID	0x7B46
Int. Line	0x00
Int. Pin	0x01
PCI capability	
Caps class	Power Management
Caps offset	0xC8
Caps version	1.2
PCI capability	
Caps class	Message Signalled
Interrupts	
Caps offset	0xD0
PCI capability	
Caps class	0x13
Caps offset	0xE0
PCI registers	
00 01 02 03 04 05 06 07 08 09 0A 0B 0C	
0D 0E 0F	
0086 80 B8 15 06 04 10 00 00 00 00 02	
00 00 00 00	
1000 00 40 DF 00 00 00 00 00 00 00 00	
00 00 00 00	
2000 00 00 00 00 00 00 00 00 00 00 00	
62 14 46 7B	
3000 00 00 00 C8 00 00 00 00 00 00 00	
00 01 00 00	
4000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
5000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
6000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
7000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
8028 00 00 00 08 00 00 00 00 00 00 00	
00 00 00 00	
9000 00 00 00 1F 00 00 00 00 00 00 00	
40 02 18 58	
A000 00 00 00 01 00 00 00 03 10 03 10	
00 00 00 00	
B000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
C000 00 00 00 00 00 00 00 01 D0 23 C8	
08 20 00 00	
D005 E0 81 00 30 01 E0 FE 00 00 00 00	
00 00 00 00	
E013 00 06 03 00 00 00 00 00 00 00 00	
00 00 00 00	
F000 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
Description	VGA Controller
Location	bus 1 (0x01)device 0 (0x00)function 0 (0x00)
Common header	
Vendor ID	0x10DE (NVIDIA)
Model ID	0x2182
Revision ID	0xA1
PIOx00	
SubClass	0x00
BaseClass	0x03
Cache Line	0x10
Latency	0x00
Header	0x80
PCI header	
Address 0 (memory)	0xDE000000
Address 1 (memory)	0x00000000C000000C
Address 3 (memory)	0x00000000D000000C
Address 5 (port)	0x0000E000
Subvendor ID	0x1462 (MSI)
Subsystem ID	0x375A
Int. Line	0x10
Int. Pin	0x01
PCI capability	
Caps class	Power Management
Caps offset	0x60
Caps version	1.2
PCI capability	

Caps classMessage Signalled
Interrupts
Caps offset0x68
PCI capability
Caps classPCI Express
Caps offset0x78
Device typeLegacy PCI-E Endpoint
Device
Port0
Caps version2.0
Link width16x (max 16x)
Link speed8.0 GT/s (max 8.0 GT/s)
PCI extended capability
Caps classVirtual Channel
Caps offset0x100
PCI extended capability
Caps class0x18
Caps offset0x250
PCI extended capability
Caps class0x1E
Caps offset0x258
PCI extended capability
Caps classPower Budgeting
Caps offset0x128
PCI extended capability
Caps classAdvanced Error Reporting
Caps offset0x420
PCI extended capability
Caps classVendor Specific
Caps offset0x600
Vendor1
Size36
PCI extended capability
Caps classSecondary PCI Express
Caps offset0x900
PCI extended capability
Caps classResizable BAR
Caps offset0xBB0
Resizable BARs3
BAR 0 size16 MB
BAR 1 size256 MB
BAR 2 size32 MB
PCI registers
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
00DE 10 82 21 07 00 10 00 A1 00 00 03 10 00 80 00
1000 00 00 DE 0C 00 00 C0 00 00 00 00 0C 00 00 D0
2000 00 00 00 01 E0 00 00 00 00 00 00 62 14 5A 37
3000 00 00 00 60 00 00 00 00 00 00 00 10 01 00 00
4062 14 5A 37 00 00 00 00 00 00 00 00 00 00 00 00
5000 00 00 00 01 00 00 00 CE D6 23 00 00 00 00 00
6001 68 C3 49 08 00 00 00 05 78 80 00 00 00 00 00
7000 00 00 00 00 00 00 00 10 00 12 00 E1 8D 2C 11
8010 29 09 00 03 4D 45 00 40 01 03 11 00 00 00 00
9000 00 00 00 00 00 00 00 00 00 00 00 13 08 04 00
A000 04 00 00 0E 00 00 00 03 00 1F 00 00 00 00 00
B000 00 00 00 09 00 14 01 00 00 00 00 00 00 00 00
C000 00 00 00 00 00 00 00 11 00 05 00 00 00 B9 00
D000 00 BA 00 00 00 00 00 00 00 00 00 62 14 5A 37
E062 14 5A 37 03 00 00 00 00 00 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
10002 00 01 25 00 00 00 00 00 00 00 00 00 00 00 00
11000 00 00 00 FF 00 00 80 00 00 00 00 00 00 00 00
12000 00 00 00 00 00 00 00 04 00 01 42 00 00 00 00
13021 81 07 00 00 00 00 00 00 00 00 00 00 00 00 00
14000 00 00 00 30 00 00 01 00 00 00 00 1B 00 00 BB
15095 01 00 E0 20 71 50 06 00 00 00 00 21 81 07 00
16021 81 05 00 02 80 03 00 02 80 01 00 06 80 1F 00
17006 80 1D 00 00 00 00 00 00 00 00 00 00 00 00 00
18000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
19000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

1E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionHigh Definition Audio		
(HDA)		
Locationbus 1 (0x01)	device 0 (0x00)	function 1 (0x01)
Common header		
Vendor ID0x10DE (NVIDIA)		
Model ID0x1AEB		
Revision ID0xA1		
PI0x00		
SubClass0x03		
BaseClass0x04		
Cache Line0x10		
Latency0x00		
Header0x80		
PCI header		
Address 0 (memory)0xDF080000		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x375A		
Int. Line0x11		
Int. Pin0x02		
PCI capability		
Caps classPower Management		
Caps offset0x60		
Caps version1.2		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x68		
PCI capability		
Caps classPCI Express		
Caps offset0x78		
Device typePCI-E Endpoint Device		
Port0		
Caps version2.0		
Link width16x (max 16x)		
Link speed8.0 GT/s (max 8.0 GT/s)		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
00DE 10 EB 1A 06 00 10 00 A1 00 03 04		
10 00 80 00		
1000 00 08 DF 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00		
62 14 5A 37		
3000 00 00 00 60 00 00 00 00 00 00 00		
11 02 00 00		
4062 14 5A 37 00 00 00 00 00 00 00 00		
00 00 00 00		
5000 00 00 00 00 00 00 00 CE D6 23 00		
00 00 00 00		
6001 68 03 00 08 00 00 00 05 78 80 00		
00 00 00 00		
7000 00 00 00 00 00 00 00 10 00 02 00		
E1 8D 2C 01		
8010 29 09 00 03 4D 45 00 43 01 03 11		
00 00 00 00		
9000 00 00 00 00 00 00 00 00 00 00 00		
13 08 04 00		
A000 00 00 00 0E 00 00 00 00 00 01 00		
00 00 00 00		
B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
10001 00 02 00 00 00 00 00 00 00 00 00		
30 20 46 00		
11000 20 00 00 00 A0 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00		
0E 00 01 00		
13000 02 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
14000 00 00 00 00 00 00 00 10 00 00 00		
00 00 00 0B		
15000 00 00 00 E0 20 71 10 00 00 00 00 00		
0F 00 00 00		
16025 00 01 00 01 00 00 80 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		



1D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionUSB Controller (xHCI)		
Locationbus 1 (0x01)	device 0 (0x00)	function 2 (0x02)
Common header		
Vendor ID0x10DE (NVIDIA)		
Model ID0x1AEC		
Revision ID0xA1		
PIOx30		
SubClass0x03		
BaseClass0x0C		
Cache Line0x10		
Latency0x00		
Header0x80		
PCI header		
Address 0 (memory)0x00000000D200000C		
Address 3 (memory)0x00000000D204000C		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x375A		
Int. Line0x00		
Int. Pin0x03		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x68		
PCI capability		
Caps classPCI Express		
Caps offset0x78		
Device typePCI-E Endpoint Device		
Port0		
Caps version2.0		
Link width16x (max 16x)		
Link speed8.0 GT/s (max 8.0 GT/s)		
PCI capability		
Caps classPower Management		
Caps offset0xB4		
Caps version1.2		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C		
0D 0E 0F		
00DE 10 EC 1A 06 04 10 00 A1 30 03 0C		
10 00 80 00		
100C 00 00 D2 00 00 00 00 00 00 00 00		
0C 00 04 D2		
2000 00 00 00 00 00 00 00 00 00 00 00		
62 14 5A 37		
3000 00 00 00 68 00 00 00 00 00 00 00		
00 03 00 00		
4000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
5000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6031 60 00 00 00 00 00 00 05 78 81 00		
F0 01 E0 FE		
7000 00 00 00 00 00 00 00 10 B4 02 00		
E0 8D 2C 01		
8010 29 09 00 03 4D 45 00 40 00 03 11		
00 00 00 00		
9000 00 00 00 00 00 00 00 00 00 00 00		
13 08 04 00		
A000 00 00 00 0E 00 00 00 00 00 01 00		
00 00 00 00		
B000 00 00 00 01 00 43 48 08 00 00 00		
00 00 00 00		
C000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
10001 00 02 00 00 00 00 00 00 00 40 00		
30 20 46 00		
11000 20 00 00 00 A0 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
13000 00 00 00 00 00 00 00 0E 00 01 00		
00 03 00 00		
14025 00 01 00 01 00 00 80 00 00 00 00		
00 00 00 00		
15000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
16000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		

1A000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1B000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1C000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1D000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00	
1E000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1F000	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
DescriptionSerial Bus Controller	
Locationbus 1 (0x01)	device 0 (0x00)function 3 (0x03)
Common header	
Vendor ID0x10DE (NVIDIA)	
Model ID0x1AED	
Revision ID0xA1	
PI0x00	
SubClass0x80	
BaseClass0x0C	
Cache Line0x10	
Latency0x00	
Header0x80	
PCI header	
Address 0 (memory)0xDF084000	
Subvendor ID0x1462 (MSI)	
Subsystem ID0x375A	
Int. Line0x00	
Int. Pin0x04	
PCI capability	
Caps classMessage Signalled	
Interrupts	
Caps offset0x68	
PCI capability	
Caps classPCI Express	
Caps offset0x78	
Device typePCI-E Endpoint Device	
Port0	
Caps version2.0	
Link width16x (max 16x)	
Link speed8.0 GT/s (max 8.0 GT/s)	
PCI capability	
Caps classPower Management	
Caps offset0xB4	
Caps version1.2	
PCI extended capability	
Caps classAdvanced Error Reporting	
Caps offset0x100	
PCI registers	
00 01 02 03 04 05 06 07 08 09 0A 0B 0C	
0D 0E 0F	
00DE 10 ED 1A 06 04 10 00 A1 00 80 0C	
10 00 80 00	
1000 40 08 DF 00 00 00 00 00 00 00 00 00	
00 00 00 00	
2000 00 00 00 00 00 00 00 00 00 00 00 00	
62 14 5A 37	
3000 00 00 00 68 00 00 00 00 00 00 00 00	
00 04 00 00	
4000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
5000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
6000 00 00 00 00 00 00 00 05 78 81 00	
B0 01 E0 FE	
7000 00 00 00 00 00 00 00 10 B4 02 00	
E0 8D 2C 01	
8010 29 09 00 03 4D 45 00 40 00 03 11	
00 00 00 00	
9000 00 00 00 00 00 00 00 00 00 00 00 00	
13 08 04 00	
A000 00 00 00 0E 00 00 00 00 00 01 00	
00 00 00 00	
B000 00 00 00 01 00 43 48 08 00 00 00	
00 00 00 00	
C000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
D000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
E000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
F000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
10001 00 02 00 00 00 00 00 00 00 00 00 00	
30 20 46 00	
11000 20 00 00 00 A0 00 00 00 00 00 00	
00 00 00 00	
12000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
13000 00 00 00 00 00 00 00 0E 00 01 00	
00 00 00 00	
14025 00 01 00 01 00 00 80 00 00 00 00	
00 00 00 00	
15000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
16000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
17000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	
18000 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 00 00	

19000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1D000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionUSB Controller (xHCI)		
Locationbus 3 (0x03)	device 0 (0x00)	function 0 (0x00)
Common header		
Vendor ID0x1B21 (ASMedia)		
Model ID0x2142		
Revision ID0x00		
PI0x30		
SubClass0x03		
BaseClass0x0C		
Cache Line0x10		
Latency0x00		
Header0x00		
PCI header		
Address 0 (memory)0x00000000DF300004		
Subvendor ID0x1462 (MSI)		
Subsystem ID0x7B46		
Int. Line0x00		
Int. Pin0x01		
PCI capability		
Caps classMessage Signalled Interrupts		
Caps offset0x50		
PCI capability		
Caps classMSI-X		
Caps offset0x68		
PCI capability		
Caps classPower Management		
Caps offset0x78		
Caps version1.2		
PCI capability		
Caps classPCI Express		
Caps offset0x80		
Device typeLegacy PCI-E Endpoint Device		
Port0		
Caps version2.0		
Link width2x (max 2x)		
Link speed8.0 GT/s (max 8.0 GT/s)		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI extended capability		
Caps classSecondary PCI Express		
Caps offset0x200		
PCI extended capability		
Caps class0x18		
Caps offset0x300		
PCI registers		
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F		
0021 1B 42 21 06 04 10 00 00 30 03 0C 10 00 00 00		
1004 00 30 DF 00 00 00 00 00 00 00 00 00		
00 00 00 00		
2000 00 00 00 00 00 00 00 00 00 00 00 00 00		
62 14 46 7B		
3000 00 00 00 50 00 00 00 00 00 00 00 00		
00 01 00 00		
4000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
5005 68 86 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
6030 40 00 00 00 00 00 00 11 78 07 80 00 20 00 00		
7080 20 00 00 00 00 00 00 01 80 43 C8 08 00 00 00		
8010 00 12 00 22 82 E8 07 30 28 10 00 23 DC 43 00		
9040 00 23 10 00 00 00 00 00 00 40 00 00 00 00 00		
A000 00 00 00 00 08 00 00 00 04 00 00 0E 00 00 00		
B003 00 1E 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
C000 00 00 00 21 1B 01 02 00 00 00 00 00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 01 40 00 00 00 00 00 00 00 00		
F000 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
10001 00 01 20 00 00 00 00 00 00 00 00		
31 20 06 00		
11001 00 00 00 00 20 00 00 20 00 00 00 00 00 00 00		

12000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
13000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
14000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
15000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
16000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
17000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
18000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
19000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1A000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1B000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1C000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1D000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00	
1E000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
1F000	00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00	
DescriptionNetwork Controller	
Locationbus 4 (0x04)	device 0 (0x00)function 0 (0x00)
Common header	
Vendor ID0x168C (Qualcomm Atheros)	
Model ID0x0030	
Revision ID0x01	
PI0x00	
SubClass0x80	
BaseClass0x02	
Cache Line0x10	
Latency0x00	
Header0x00	
PCI header	
Address 0 (memory)0x00000000DF2E0004	
Subvendor ID0x168C (Qualcomm Atheros)	
Subsystem ID0x3112	
Int. Line0x00	
Int. Pin0x01	
PCI capability	
Caps classPower Management	
Caps offset0x40	
Caps version1.2	
PCI capability	
Caps classMessage Signalled Interrupts	
Caps offset0x50	
PCI capability	
Caps classPCI Express	
Caps offset0x70	
Device typePCI-E Endpoint Device	
Port0	
Caps version2.0	
Link width1x (max 1x)	
Link speed2.5 GT/s (max 2.5 GT/s)	
PCI extended capability	
Caps classAdvanced Error Reporting	
Caps offset0x100	
PCI extended capability	
Caps classVirtual Channel	
Caps offset0x140	
PCI extended capability	
Caps classDevice Serial Number	
Caps offset0x300	
Serial (EUI-64)0-0	
PCI registers	
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F	
008C 16 30 00 46 05 10 00 01 00 80 02 10 00 00 00	
1004 00 2E DF 00 00 00 00 00 00 00 00 00 00 00 00	
2000 00 00 00 00 00 00 00 00 00 00 00 8C 16 12 31	
3000 00 00 00 40 00 00 00 00 00 00 00 00 01 00 00	
4001 50 C3 5B 00 00 00 00 00 00 00 00 00 00 00 00	
5005 70 A5 01 38 02 E0 FE 00 00 00 00 00 00 00 00	
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
7010 00 02 00 00 87 90 05 10 20 00 00 11 5C 03 00	
8040 00 11 10 00 00 00 00 00 00 00 00 00 00 00 00	
9000 00 00 00 10 00 00 00 00 00 00 00 00 00 00 00	
A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	
B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	

C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
10001 00 01 14 00 00 00 00 00 00 00 00 00 00		
30 20 06 00		
11000 00 00 00 00 20 00 00 00 00 00 00 00 00		
00 00 00 00		
12000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
13000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
14002 00 01 30 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
15000 00 00 00 FF 00 00 80 00 00 00 00 00 00		
00 00 00 00		
16000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
17000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
18000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
19000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1A000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1D000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00		
1E000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00		
DescriptionNVM Express (NVMe)		
Controller		
Locationbus 5 (0x05)	device 0 (0x00)	function 0 (0x00)
Common header		
Vendor ID0x144D (Samsung)		
Model ID0xA804		
Revision ID0x00		
PIOx02		
SubClass0x08		
BaseClass0x01		
Cache Line0x10		
Latency0x00		
Header0x00		
PCI header		
Address 0		
(memory)0x00000000DF100004		
Subvendor ID0x144D (Samsung)		
Subsystem ID0xA801		
Int. Line0x00		
Int. Pin0x01		
PCI capability		
Caps classPower Management		
Caps offset0x40		
Caps version1.2		
PCI capability		
Caps classMessage Signalled		
Interrupts		
Caps offset0x50		
PCI capability		
Caps classPCI Express		
Caps offset0x70		
Device typePCI-E Endpoint Device		
Port0		
Caps version2.0		
Link width4x (max 4x)		
Link speed8.0 GT/s (max 8.0 GT/s)		
PCI capability		
Caps classMSI-X		
Caps offset0xB0		
PCI extended capability		
Caps classAdvanced Error Reporting		
Caps offset0x100		
PCI extended capability		
Caps classDevice Serial Number		
Caps offset0x148		
Serial (EUI-64)0-0		
PCI extended capability		
Caps classPower Budgeting		
Caps offset0x158		
PCI extended capability		
Caps classSecondary PCI Express		
Caps offset0x168		
PCI extended capability		
Caps class0x18		
Caps offset0x188		
PCI extended capability		
Caps class0x1E		
Caps offset0x190		
PCI registers		

00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
004D 14 04 A8 06 04 10 00 00 02 08 01 10 00 00 00
1004 00 10 DF 00 00 00 00 00 00 00 00 00 00 00 00
2000 00 00 00 00 00 00 00 00 00 00 00 4D 14 01 A8
3000 00 00 00 40 00 00 00 00 00 00 00 00 01 00 00
4001 50 03 00 08 00 00 00 00 00 00 00 00 00 00 00
5005 70 8A 00 00 00 00 00 00 00 00 00 00 00 00 00
6000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
7010 B0 02 00 C1 8F E8 17 30 28 10 00 43 78 47 00
8040 01 43 10 00 00 00 00 00 00 00 00 00 00 00 00
9000 00 00 00 1F 08 00 00 00 04 00 00 0E 00 00 00
A003 00 1E 00 00 00 00 00 00 00 00 00 00 00 00 00
B011 00 07 80 00 30 00 00 00 20 00 00 00 00 00 00
C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D003 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
10001 00 82 14 00 00 00 00 00 00 40 00 30 20 46 00
11000 00 00 00 00 60 00 00 A0 00 00 00 00 00 00 00
12000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
13000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
14000 00 00 00 00 00 00 00 03 00 81 15 00 00 00 00
15000 00 00 00 00 00 00 00 04 00 81 16 00 00 00 00
16000 00 00 00 01 00 00 00 19 00 81 18 00 00 00 00
17000 00 00 00 00 75 00 75 00 75 00 75 00 00 00 00
18000 00 00 00 00 00 00 00 18 00 01 19 03 10 03 10
1901E 00 01 00 1F 0A 28 00 00 00 00 00 B0 00 00 00
1A000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1B000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1C000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1D000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1E000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
1F000 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
DMI ----- -----
SMBIOS Version2.8
DMI BIOS
vendorAmerican Megatrends Inc.
version1.B0
date06/09/2020
ROM size16384 KB
DMI System Information
manufacturerMicro-Star International Co. Ltd.
productMS-7B46
version1.0
serialDefault string
UUID{00000000-0000-0000-0000- 309C238074B8}
SKUDefault string
familyDefault string
DMI Baseboard
vendorMicro-Star International Co. Ltd.
modelZ370 KRAIT GAMING (MS- 7B46)
revision1.0
serialHC16091811
DMI System Enclosure
manufacturerMicro-Star International Co. Ltd.
chassis typeDesktop
chassis serialDefault string
DMI Port Connector
designationJ1A1 (internal)
designationPS2Mouse (external)
port typeMouse Port
connectorPS/2
DMI Port Connector
designationJ1A1 (internal)

designationKeyboard (external)
port typeKeyboard Port
connectorPS/2
DMI Port Connector
designationJ2A1 (internal)
designationTV Out (external)
connectorMini Centronics Type-14
DMI Port Connector
designationJ2A2A (internal)
designationCOM A (external)
port typeSerial Port 16550A
connectorDB-9 male
DMI Port Connector
designationJ2A2B (internal)
designationVideo (external)
port typeVideo Port
connectorDB-15 female
DMI Port Connector
designationJ3A1 (internal)
designationUSB1 (external)
port typeUSB
connectorAccess Bus (USB)
DMI Port Connector
designationJ9A1 - TPM HDR (internal)
DMI Port Connector
designationJ9C1 - PCIE DOCKING
CONN (internal)
DMI Port Connector
designationJ2B3 - CPU FAN (internal)
DMI Port Connector
designationJ6C2 - EXT HDMI (internal)
DMI Port Connector
designationJ3C1 - GMCH FAN
(internal)
DMI Port Connector
designationJ1D1 - ITP (internal)
DMI Port Connector
designationJ9E2 - MDC INTPSR
(internal)
DMI Port Connector
designationJ9E4 - MDC INTPSR
(internal)
DMI Port Connector
designationJ9E3 - LPC HOT DOCKING
(internal)
DMI Port Connector
designationJ9E1 - SCAN MATRIX
(internal)
DMI Port Connector
designationJ9G1 - LPC SIDE BAND
(internal)
DMI Port Connector
designationJ8F1 - UNIFIED (internal)
DMI Port Connector
designationJ6F1 - LVDS (internal)
DMI Port Connector
designationJ2F1 - LAI FAN (internal)
DMI Port Connector
designationJ2G1 - GFX VID (internal)
DMI Port Connector
designationJ1G6 - AC JACK (internal)
DMI Extension Slot
designationJ6B2
typePCI Express
populatedyes
DMI Extension Slot
designationJ6B1
typePCI Express
populatedyes
DMI Extension Slot
designationJ6D1
typePCI Express
populatedyes
DMI Extension Slot
designationJ7B1
typePCI Express
populatedyes
DMI Extension Slot
designationJ8B4
typePCI Express
populatedyes
DMI Extension Slot
designationJ8D1
typePCI Express
populatedyes
DMI Extension Slot
designationJ8B3
typePCI

width	32 bits
populated	yes
DMI OEM Strings	
string[0]	Default string
DMI Physical Memory Array	
location	Motherboard
usage	System Memory
correction	None
max capacity	64 GB
max# of devices	4
DMI Memory Device	
designation	ChannelA-DIMM0
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB
speed	3200 MHz
manufacturer	029E
part number	CMK16GX4M2B3000C15
serial number	00000000
voltage	1.350000
DMI data	
	0000x11 0x28 0x3A 0x00 0x39 0x00
	0xFE 0xFF 0x40 0x00
	0100x40 0x00 0x00 0x20 0x09 0x00
	0x01 0x02 0x1A 0x80
	0200x40 0x80 0x0C 0x03 0x04 0x05
	0x06 0x01 0x00 0x00
	0300x00 0x00 0x80 0x0C 0x00 0x00
	0x00 0x00 0x46 0x05
	0400x43 0x68 0x61 0x6E 0x6E 0x65
	0x6C 0x41 0x2D 0x44
	0500x49 0x4D 0x4D 0x30 0x00 0x42
	0x41 0x4E 0x4B 0x20
	0600x30 0x00 0x30 0x32
DMI Memory Device	
designation	ChannelA-DIMM1
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB
speed	3200 MHz
manufacturer	029E
part number	CMK16GX4M2B3000C15
serial number	00000000
voltage	1.350000
DMI data	
	0000x11 0x28 0x3B 0x00 0x39 0x00
	0xFE 0xFF 0x40 0x00
	0100x40 0x00 0x00 0x20 0x09 0x00
	0x01 0x02 0x1A 0x80
	0200x40 0x80 0x0C 0x03 0x04 0x05
	0x06 0x01 0x00 0x00
	0300x00 0x00 0x80 0x0C 0x00 0x00
	0x00 0x00 0x46 0x05
	0400x43 0x68 0x61 0x6E 0x6E 0x65
	0x6C 0x41 0x2D 0x44
	0500x49 0x4D 0x4D 0x31 0x00 0x42
	0x41 0x4E 0x4B 0x20
	0600x31 0x00 0x30 0x32
DMI Memory Device	
designation	ChannelB-DIMM0
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB
speed	3200 MHz
manufacturer	029E
part number	CMK16GX4M2B3000C15
serial number	00000000
voltage	1.350000
DMI data	
	0000x11 0x28 0x3C 0x00 0x39 0x00
	0xFE 0xFF 0x40 0x00
	0100x40 0x00 0x00 0x20 0x09 0x00
	0x01 0x02 0x1A 0x80
	0200x40 0x80 0x0C 0x03 0x04 0x05
	0x06 0x01 0x00 0x00
	0300x00 0x00 0x80 0x0C 0x00 0x00
	0x00 0x00 0x46 0x05
	0400x43 0x68 0x61 0x6E 0x6E 0x65
	0x6C 0x42 0x2D 0x44
	0500x49 0x4D 0x4D 0x30 0x00 0x42
	0x41 0x4E 0x4B 0x20
	0600x32 0x00 0x30 0x32
DMI Memory Device	
designation	ChannelB-DIMM1
format	DIMM
type	DDR4
total width	64 bits
data width	64 bits
size	8 GB
speed	3200 MHz
manufacturer	029E



part numberCMK16GX4M2B3000C15				
serial number00000000				
voltage1.350000				
DMI data				
0000x11 0x28 0x3D 0x00 0x39 0x00				
0xFE 0xFF 0x40 0x00				
0100x40 0x00 0x00 0x20 0x09 0x00				
0x01 0x02 0x1A 0x80				
0200x40 0x80 0x0C 0x03 0x04 0x05				
0x06 0x01 0x00 0x00				
0300x00 0x00 0x80 0x0C 0x00 0x00				
0x00 0x00 0x46 0x05				
0400x43 0x68 0x61 0x6E 0x6E 0x65				
0x6C 0x42 0x2D 0x44				
0500x49 0x4D 0x4D 0x31 0x00 0x42				
0x41 0x4E 0x4B 0x20				
0600x33 0x00 0x30 0x32				
DMI Processor				
manufacturerIntel(R) Corporation				
modelIntel(R) Core(TM) i5-9600K				
CPU @ 3.70GHz				
clock speed3700.0 MHz				
FSB speed100.0 MHz				
multiplier37.0x				
max clock speed8300.0 MHz				
DMI data				
0000x04 0x30 0x43 0x00 0x01 0x03				
0xCD 0x02 0xED 0x06				
0100x09 0x00 0xFF 0xFB 0xEB 0xBF				
0x03 0x8A 0x64 0x00				
0200x6C 0x20 0x74 0x0E 0x41 0x32				
0x40 0x00 0x41 0x00				
0300x42 0x00 0x04 0x05 0x06 0x06				
DMI Extension Slot				
designationPCI-Express				
typePCI Express				
populatedyes				
DMI Extension Slot				
designationPCI-Express 6				
typePCI Express				
populatedyes				
DMI Extension Slot				
designationPCI-Express 7				
typePCI Express				
populatedno				
DMI Extension Slot				
designationPCI-Express 8				
typePCI Express				
populatedyes				
Storage				
-----				
-----				
Drive0/0/-1/-1				
Device				
Path\\?\scsi#disk&ven_&prod_ct480bx				
500ssd1#4&88d9d98&0&000000#{53f563				
07-b6bf-11d0-94f2-00a0c91efb8b}				
NameCT480BX500SSD1				
RevisionM6CR041				
Serial2110E582B803				
Capacity447.1 GB				
TypeFixed	SSD			
Bus TypeSATA (11)				
FeaturesSMART	TRIM			
ControllerSerial ATA Controller - AHCI				
at bus 0	device 23	function 0		
Volumed:\	447.1 GBytes (17.4 percent available)			
Drive1/1/-1/-1				
Device				
Path\\?\scsi#disk&ven_nvme&prod_sa				
msung_ssd_960#5&2b9413c&0&000000#				
{53f56307-b6bf-11d0-94f2-00a0c91efb8b}				
NameSamsung SSD 960 EVO 250GB				
Revision3B7QCXE7				
SerialS3ESNX1K100478Z				
Capacity232.9 GB				
TypeFixed	SSD			
Bus TypeNVMe (17)				
Features				
ControllerNVM Express (NVMe)				
Controller at bus 5	device 0	function 0		
Link SpeedPCI-E 4x @ 8.0 GT/s				
Volumec:\	232.2 GBytes (38.8 percent available)			
USB Devices				
-----				
-----				
USB DeviceDispositivo USB composito	class=0x00	subclass=0x00	vendor=0x1038	product=0x12AA
USB DeviceDispositivo USB composito	class=0x00	subclass=0x00	vendor=0x2516	product=0x0157
USB DeviceDispositivo USB composito	class=0xEF	subclass=0x02	vendor=0x045E	product=0x074A
USB DeviceGeneric Bluetooth Adapter	class=0xE0	subclass=0x01	vendor=0x0A5C	product=0x2101

USB DeviceHub USB generico	class=0x09	subclass=0x00	vendor=0x0BDA	product=0x5411
USB DeviceDispositivo di input USB	class=0x00	subclass=0x00	vendor=0x0B05	product=0x186E
USB DeviceDispositivo USB composito	class=0x00	subclass=0x00	vendor=0x046D	product=0xC083
USB DeviceDispositivo di archiviazione di massa USB	class=0x00	subclass=0x00	vendor=0x1058	product=0x0827
Graphics				
-----				
-----				
Number of adapters2				
Graphic APIs				
-----				
-----				
APID3D				
APINVIDIA I/O				
APINVIDIA NVML				
APINVIDIA NVAPI				
pwrMask0x000C0B1F				
pwrTable[DF E2 E9 FF FA 00 00 00 E8 F5 00 F6 00 00 00 00 00 01 01 00 00 00 00 00 00 00 00 00 00 00 ]				
APIIntel I/O				
APIIntel oneAPI				
Display Adapters				
-----				
-----				
Display adapter 0				
ID0x4000000				
NameIntel(R) UHD Graphics 630				
Board ManufacturerMicro-Star International Co.	Ltd. (MSI)			
CodenameCoffee Lake GT2				
Execution Units24				
Technology14 nm				
PCI devicebus 0 (0x0)	device 2 (0x2)	function 0 (0x0)		
Vendor ID0x8086 (0x1462)				
Model ID0x3E98 (0x7B46)				
Revision ID0x2				
Driver version31.0.101.2121				
WDDM Model3.1				
Display adapter 1 (primary)				
ID0x10A0116				
NameNVIDIA GeForce GTX 1660 Ti				
Board ManufacturerMicro-Star International Co.	Ltd. (MSI)			
RevisionA1				
CodenameTU116-400				
Core family0x168 (TU116-A)				
Power Limit130.0 W (current)	130.0 W (default)	140.0 W (max)		
Thermal Limit90.0 °C (max)	92.0 °C (slowdown)	95.0 °C (shutdown)		
Cores1536				
ROP Units48				
TM Units96				
Technology12 nm				
Memory typeGDDR6 (Micron)				
Memory size6 GB				
Memory bus width192 bits				
Current Link Widthx16				
Current Link Speed8.0 GT/s				
PCI devicebus 1 (0x1)	device 0 (0x0)	function 0 (0x0)		
Vendor ID0x10DE (0x1462)				
Model ID0x2182 (0x375A)				
Revision ID0xA1				
Root devicebus 0 (0x0)	device 1 (0x1)	function 0 (0x0)		
Performance LevelBase				
Core clock1500.0 MHz				
Memory clock6001.0 MHz				
Performance LevelBoost				
Core clock1875.0 MHz				
Memory clock6001.0 MHz				
Performance LevelCurrent				
Core clock1320.0 MHz				
Memory clock6121.0 MHz				
Driver version31.0.15.3699				
WDDM Model3.1				
Win32_VideoControllerAdapterRAM = 0x40000000 (1073741824)				
Win32_VideoControllerAdapterRAM = 0xFFFF00000 (4293918720)				
Win32_VideoControllerDriverVersion = 31.0.101.2121				
Win32_VideoControllerDriverVersion = 31.0.15.3699				
Win32_VideoControllerDriverDate = 03/03/2023				
Win32_VideoControllerDriverDate = 08/04/2023				
Monitor 0				
ModelXG248Q ()				
IDAUS24B3				
SerialL8LMRS060911				
Manufacturing DateWeek 35	Year 2020			
Size24.0 inches				
Max Resolution1920 x 1080 @ 60 Hz				

Horizontal Freq. Range255-255 kHz		
Vertical Freq. Range48-240 Hz		
Max Pixel Clock590 MHz		
Gamma Factor2.2		
Monitor 1		
ModelHP 24o ()		
IDHPN337C		
SerialCNK7241K5V		
Manufacturing DateWeek 24                      Year 2017		
Size24.0 inches		
Max Resolution1920 x 1080 @ 60 Hz		
Horizontal Freq. Range24-80 kHz		
Vertical Freq. Range50-76 Hz		
Max Pixel Clock170 MHz		
Gamma Factor2.2		
Software		
-----		
-----		
Windows VersionMicrosoft Windows		
11 (10.0) Professional 64-bit    (Build		
22621)		
DirectX Version12.0		
Register Spaces		
-----		
-----		
Register spacePCI		
Register spacePCI #2		