

# **主板中文使用手册**

**战斧 B365M-HD PRO V21**

**BATTLE-AX B365M-HD PRO V21**

**[www.colorful.cn](http://www.colorful.cn)**

技术服务热线：400-678-5866

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根据中华人民共和国信息产业部发布的《电子信息产品污染控制管理办法》所展开的 SJ/T11364-2006 标准要求，本产品污染控制标识以及有毒有害物质或元素标识说明如下：

**产品有毒有害物质或元素标识：**

**产品中有毒有害物质或元素的名称及含量**

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr <sup>VI</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
PCB 板	×	○	○	○	○	○
结构件	○	○	○	○	○	○
芯片	○	○	○	○	○	○
连接器	○	○	○	○	○	○
被动电子元器件	○	○	○	○	○	○
焊接金属	○	○	○	○	○	○
线材	×	○	○	○	○	○
助焊剂, 散热膏, 标签以及其他耗 材	○	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

备注：×位置的铅的含量超出 SJ/T11363-2006 标准规定的限量要求，但符合欧盟 RoHS 指令的豁免条款。

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如果您的系统出现问题，并且无法从本主板使用手册中获得帮助，请联系您所购买主板的经销商。此外您还可以尝试通过以下方式获得帮助：

访问七彩虹的官方网站(<http://www.colorful.cn/>)获取产品和驱动程序等信息支持，还可以登录七彩虹官方论坛(<http://bbs.colorful.cn>)，获取技术指导。

通过拨打400-678-5866客户服务热线进行咨询，此外还可以直接与七彩虹各属地平台服务中心联系，具体联系方法如下：

七彩虹科技全国区域售后服务平台业务范围及联系方式		
平台名称	服务范围	联系方法
北京服务平台	北京、天津、河北、河南、山东、山西、内蒙古	010—51261907
沈阳服务平台	辽宁、吉林、黑龙江	024—31321755
武汉服务平台	湖北、湖南、江西	027—87865811
南京服务平台	江苏、安徽、浙江	025—83611912
上海服务平台	上海	021—64681880
广州服务平台	广东、广西、福建、海南	020—85276624
成都服务平台	四川、重庆、云南、贵州、西藏	028—85228026
西安服务平台	陕西、甘肃、宁夏、青海、新疆	029—87895086
深圳服务平台	深圳地区	0755—33083060

注意：以上电话如有变动，请拨打400-678-5866服务热线查询。

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# 在您开始之前

## 主板包装盒内附标准组件

在您打开本主板包装盒之后, 请马上检查下面所列出的各项标准配件是否齐全。

- 1 块战斧 B365M-HD PRO V21 主板
- 2 条 SATA 数据线
- 1 张驱动光盘
- 1 片后置面板 IO 档板
- 1 本主板中英文使用手册



注意:以上配件仅供参考, 请以实物为准, 七彩虹科技保留修改的权利。



**Note:** 若以上列出的任何一项配件有损坏的情形, 请尽快与您的经销商联络或致电七彩虹客服。

注意: 产品规格/CPU 支持/产品附件以产品发布之时为准。



# 第一章 简介

感谢您购买七彩虹主板，该主板提供了非常优越的性能和品质保证。

## 1-1 主板特色

战斧 B365M-HD PRO V21 主板采用 Intel B365 芯片组,支持 Intel LGA1151 接口 Coffee Lake-S 系列处理器,支持双通道 DDR4 2133/2400/2666MHz 规格内存,支持 PCI-E3.0 规范。

主板提供 2 个 DDR4 内存条插槽、1 个 HDMI 接口、1 个 DVI 接口、1 个 VGA 接口、4 个 SATA3.0 接口、板载 6 声道声卡、集成千兆网卡，性能强劲,是性价比的终极选择!

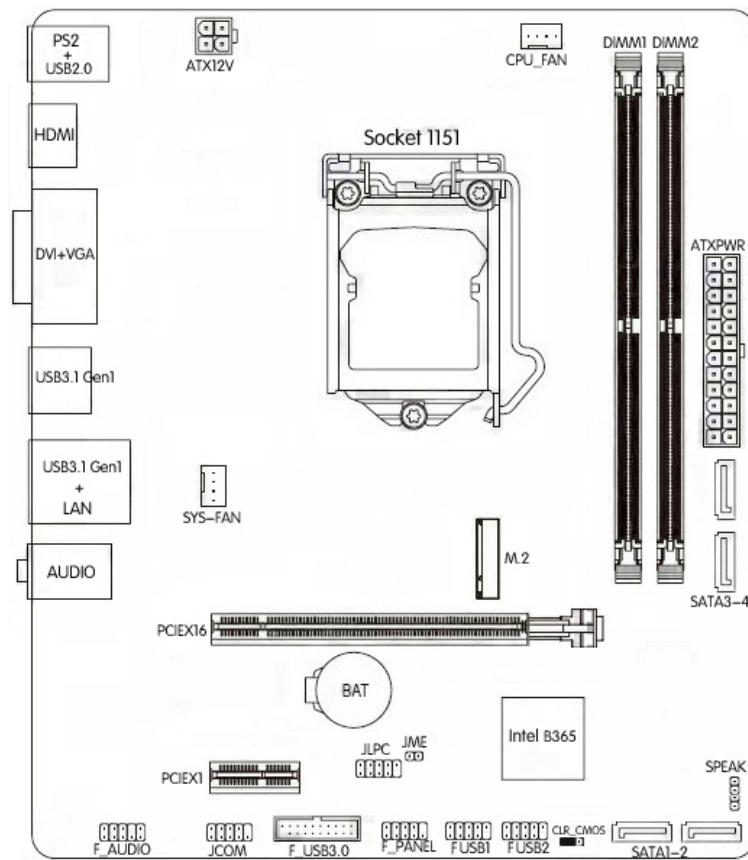
主板提供 1 个 PCI Express3.0x16 插槽、1 个 PCI Express3.0x1 插槽、1 个 M.2 插槽，扩展模式丰富，扩展性能强劲。

## 1-2 主板规格

- 设计
  - mATX 板型规范
- 芯片组
  - 主板采用 Intel B365 高速芯片组
- 中央处理器
  - 支持 Intel LGA1151 接口 Coffee Lake-S 系列处理器
  - 温馨提示：当您使用大功率的处理器时，请搭配专业的CPU散热风扇！
- 内存
  - 提供 2 个内存条插槽
  - 支持双通道 DDR4 2133/2400/2666MHz 规格内存,支持 XMP 内存
- 扩展插槽
  - 1 个 PCI Express 3.0x16 插槽
  - 1 个 PCI Express3.0 x1 插槽
  - 1 个 M.2 插槽( 支持 PCI-e x4 SSD,支持 NVME 规范,支持 Intel OPTANE 技术 )

- 存储设备
  - 主板提供 4 个 SATA3.0 6Gb/s 硬盘接口
- 6 声道音频设备
  - 整合 6 声道高清晰数字音频控制器
  - 支持 6 声道 3D 环绕声效
- 网络功能
  - 主板采用千兆网卡
  - 支持 10/100/1000Mbps 数据传输率
- USB 接口
  - 主板提供 6 个 USB2.0 和 6 个 USB3.1 Gen1 接口（含扩展）
- 板载连接头/跳线/按钮
  - 1 个前置音频接口连接头 (F\_AUDIO)
  - 1 个前面板开关机和指示灯连接头 (F\_PANEL)
  - 2 个 USB2.0 接口扩展连接头 (FUSB1, FUSB2)
  - 1 个 USB3.1 Gen1 接口扩展连接头 (F\_USB3.0)
  - 1 个 DEBUG 连接头 (JLPC)
  - 1 个 COM 连接头 (JCOM)
  - 2 个风扇插座 (CPU\_FAN, SYS\_FAN)
  - 1 个喇叭连接头 (SPEAK)
  - 1 个清 CMOS 跳线 (CLR\_CMOS)
  - 1 个 ME 跳线 (JME)

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**1-3 主板布局图**

(仅供参考)

## 第二章 硬件安装

请参照以下步骤，完成电脑的安装：

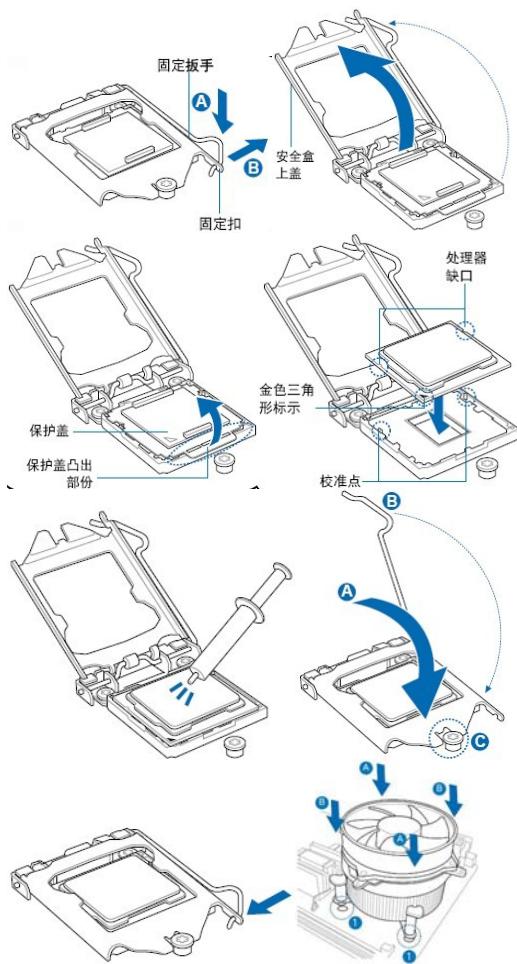
- 安装中央处理器（CPU）
- 安装内存
- 装入机箱
- 安装所有扩展卡
- 连接所有讯号线、排线、电源线及面板控制线

### 2-1 基本硬件安装

#### 安装中央处理器和风扇

本主板具备一个 Socket 1151 处理器插槽，本插槽是专为 Intel LGA1151 接口 Coffee Lake-S 系列处理器所设计。请依照以下步骤安装处理器和风扇：

- 1. 找到位于主板上的处理器插槽，将 CPU 插座旁的锁定杆从锁定状态拔到未锁定状态。
- 2. 安装 CPU，将 CPU 的金色三角形标示对准主板 CPU 插槽上的三角形标示，确定针角 1 的方向正确，不要用力插 CPU，确信 CPU 完全插入插槽中，将锁定杆从未锁定状态拔到锁定状态。（这一过程非常重要，如果操作不当，有可能会损坏 CPU，所以最好请专业人士代劳。）
- 3. 安装 CPU 风扇，并将 CPU 风扇电源线连接上。请注意，一定要安装 CPU 风扇，否则可能会温度过高从而损坏 CPU，建议用户使用原装风扇。（以下图片仅供参考）
- 4. 当使用 95W CPU 时，请搭配标准 95W 或者 95W 以上散热器！



## 安装内存

主板提供 2 个 DDR4 内存条插槽。下图所示为 DDR4 内存条插槽在主板上的位置。

- 一条内存：插入到 DIMM1 或 DIMM2 插槽。
- 两条内存：插入到 DIMM1 和 DIMM2 插槽，以组建双通道。

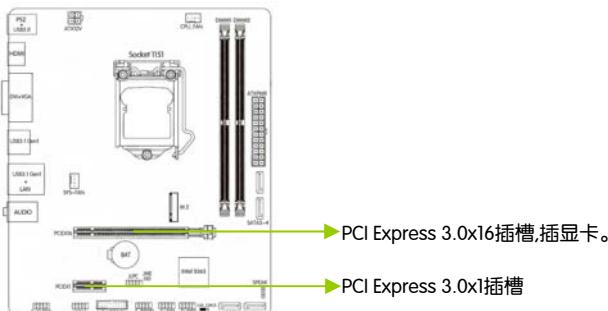


**CAUTION:** 1.请选择使用相同的内存模组安装到双通道。2. 如果您正确插入了内存模组，您将不会看到金手指部分。



## 安装显卡

主板提供 1 个 PCI Express 3.0x16 插槽，用于安装显卡。安装时，将显卡垂直压入插槽中，直到其牢固固定于插槽中为止。



## 2-2 跳线设置

### CMOS 清除插针：CLR\_CMOS

此跳线可以清除主板的 CMOS 资料（例如：日期及 BIOS 设定），回到出厂设定值。如果您要清除 CMOS 资料，请使用跳线帽短接该跳线的 Pin2-3 针脚数秒钟。（PCB 板上白色丝印为“1”的针脚，为跳线的第 1 针脚）

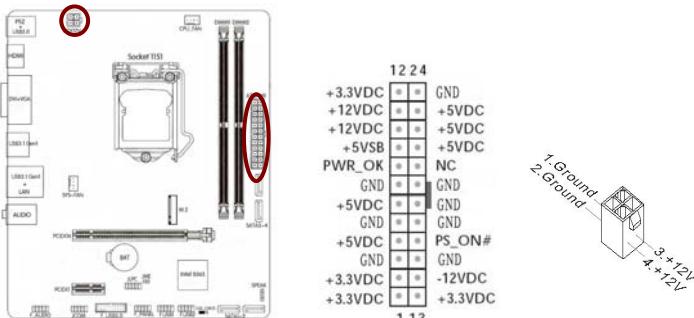


**注意：** 1. 清除 CMOS 资料前, 请先关闭计算机并拔除电源线。2. 清除 CMOS 资料后在启动计算机前, 请记得移除 Pin2-3 两针脚间的跳线帽, 否则会造成主板的损坏。

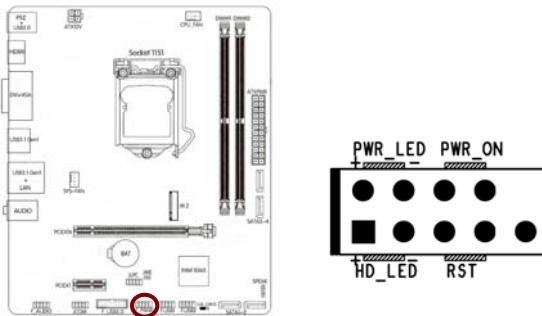
## 2-3 连接器和引脚连接头

### 电源连接器：ATXPWR, ATX12V

在与电源适配器相连时, 请务必确认, 电源适配器的接头安装方向正确, 针脚对应顺序也准确无误。4-Pin 电源接口用于为 CPU 供电。



### 前面板开关和指示灯连接：F\_PANEL



PWR\_ON: ATX 电源开关。短接此引脚可以开机。

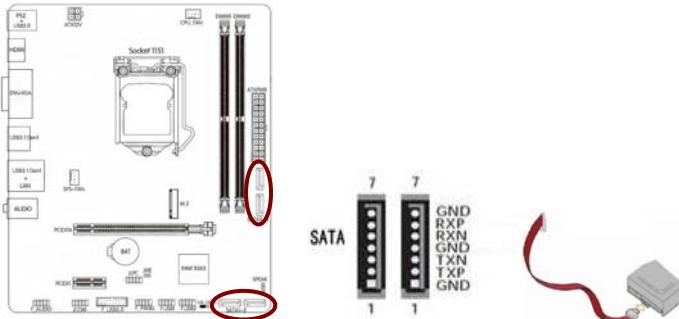
RST: 重启开关。短接此引脚,不需要关闭系统电源即可重新启动计算机。

PWR\_LED: 电源指示灯。当系统电源开启时,此灯会亮起。

HD\_LED: 硬盘指示灯。对硬盘进行数据存取时,此灯会亮起。

### SATA 端口连接器：SATA1-4

主板提供 4 个 SATA3.0 6Gb/s 硬盘接口。

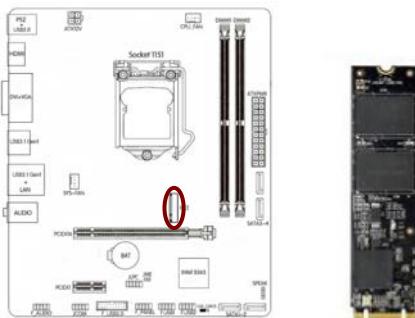


## M.2 插槽

主板提供 1 个 M.2 插槽，支持 2242/2260/2280 尺寸规格的 SSD，数据传输率最高可达 32Gb/s。支持 PCI-e x4 SSD，支持 NVME 规范，支持 Intel OPTANE 技术。

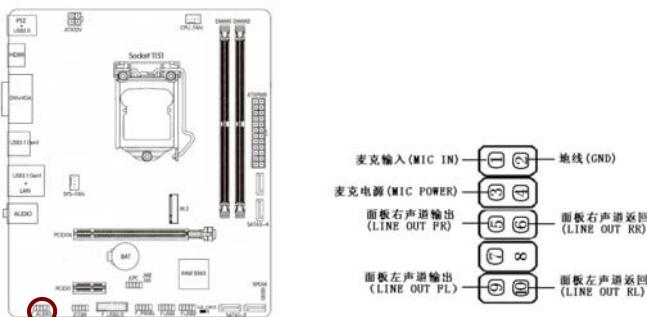
请依下列步骤将 M.2 SSD 正确安装于插槽：

- 1. 请用螺丝起子依序将螺丝和螺柱拆下，依实际要安装的 M.2SSD 规格找到适合螺丝孔位之后，先锁上螺柱。
- 2. 将 M.2 SSD 以斜角方式放入插槽。
- 3. 压住 M.2 SSD 之后，再将螺丝锁上。



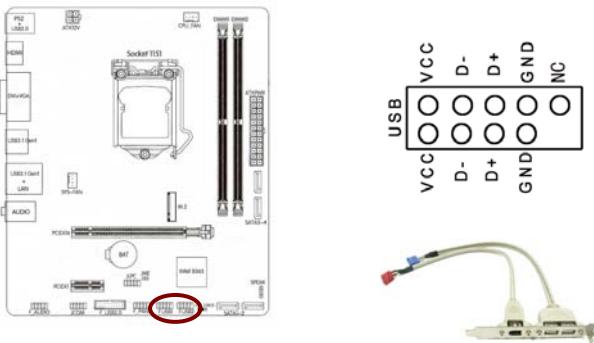
## 前置音频接口连接：F\_AUDIO

您可以在前置面板接口上连接一个音频接口，它是和 I/O 前置面板连接规格兼容的。



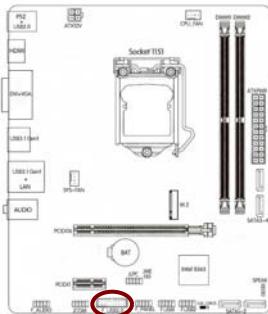
### USB2.0 接口扩展连接头：FUSB1, FUSB2

主板提供 2 个 USB2.0 连接头,可扩展至 4 个 USB2.0 接口。USB2.0 接口传输速率最高可达到 480Mbps, 可以提供高速的互联网连接、互动式电脑游戏,还可以同时运行高速的外围设备。



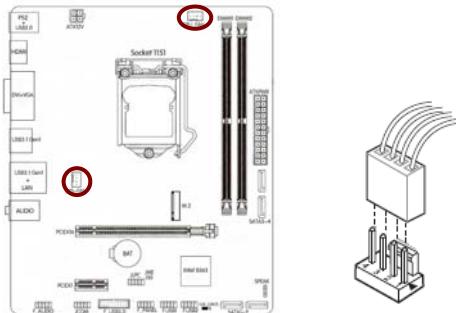
### USB3.1 Gen1 接口扩展连接头：F\_USB3.0

主板提供 1 个 USB3.1 Gen1 连接头,可扩展至 2 个 USB3.1 Gen1 接口。USB3.1 Gen1 传输速率最高可达到 5Gbps,比 USB2.0 快 10 倍。外形和普通的 USB 接口基本一致,能向下兼容 USB 2.0 和 USB 1.1 设备。



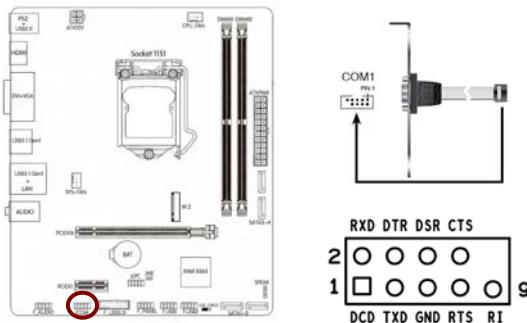
## 风扇插座：CPU\_FAN, SYS\_FAN

主板提供 2 个风扇插座,其中 CPU\_FAN 是 CPU 风扇插座,连接 CPU 风扇,用  
来降低 CPU 温度。SYS\_FAN 是系统风扇插座, 连接风扇用来降低系统温度。



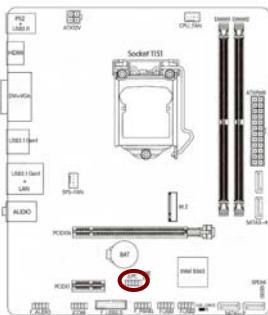
## 串行设备连接头：JCOM

主板提供 1 个 COM 连接头,用来连接串口（COM）。将串口模组的排线连  
接至这个插座,接着将该模组安装至机箱后侧面板空的插槽中。



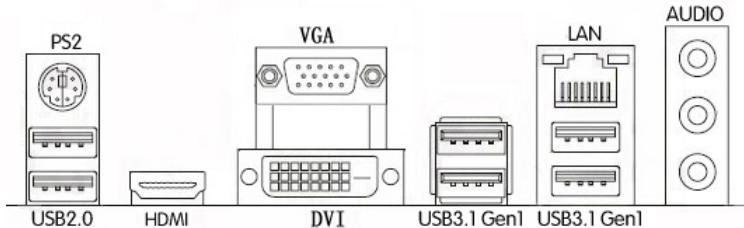
### LPC 连接头：JLPC

这个是调试主板的接口，可以转接一个数码卡来分析主板问题故障。



### 2-4 背板接口介绍

后置面板提供丰富的输入和输出接口。



主板背板接口包括：PS2 鼠标和键盘通用端口、USB2.0 接口、HDMI 接口、DVI 接口、VGA 接口、USB3.1 Gen1 接口、千兆网络接口、1 组 3 孔 6 声道音频接口（音频输入/音频输出/麦克风）。

## 第三章 驱动程序安装说明

插入七彩虹主板驱动程序安装光盘，安装程序会自动运行，弹出下面窗口。



**CAUTION:** 安装完成硬件后，必须安装对应的驱动程序，才能发挥主板的强劲性能。



(请以实物为准)

驱动光盘能自动检测主板所使用的芯片组型号、声卡型号、板载显卡型号或者板载网卡型号，点击相应的按钮安装相应的驱动。



## 第四章 BIOS 设置

该章介绍如何通过 BIOS 设置来更改系统设置，详细内容请参考此章。

该章包含下列内容：

- Main (系统信息)
- Advanced (高级 BIOS 设置)
- Chipset (高级芯片组特征)
- Security (安全设置)
- Boot (启动设置)
- C.Oclock (超频设置)
- Save & Exit (退出设置)



**CAUTION:** 由于主板的 BIOS 版本在不断的升级，所以，本手册中有关 BIOS 的描述仅供参考。

### 4-1 进入 BIOS 主界面

本章提供了 BIOS Setup 程序的信息，让用户可以自己配置优化系统设置。

如下情形您需要运行 SETUP 程序：



- Note:**
1. 系统自检时屏幕上出现错误信息，并要求进入 SETUP 程序。
  2. 您想根据客户特征更改出厂时的默认设置。

#### 进入设定程序

在计算机启动时，BIOS 进入开机自检(Post)程序，自检程序是一系列固定在 BIOS 中的诊断程序，当自检程序执行完成后，显示出如下信息：

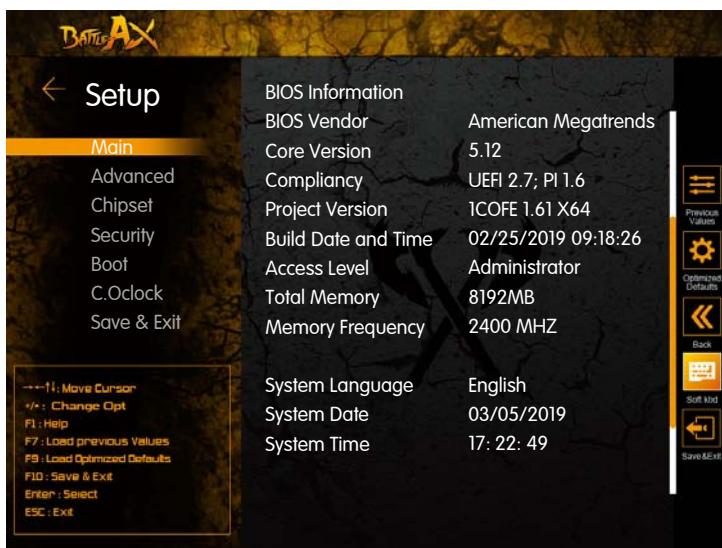
**Press DEL to enter Setup.**

(按 DEL > 键即可进入 SETUP )。

如果此信息在您做出反应前就消失了，您可以关机后再开机或按机箱上的 Reset 键，重启您的电脑，也可以同时按下 <Ctrl> + <Alt>+<Delete> 来重启电脑。

## 控制键位

- < ↑ ↓ ← → > 向上、向下、向左或向右移动光标以选择项目
- < Enter > 选定此选项
- < +/PU > 增加数值或改变选择项
- < -/PD > 减少数值或改变选择项
- < F1 > 主题帮助，仅在状态显示菜单和选择设定菜单有效
- < F7> 恢复前次的 BIOS 设定值，仅在选择设定菜单时有效
- < F9> 载入优化缺省值
- < F10> 保存改变后的 BIOS 设定值并退出
- < Esc > 退出菜单或者从子菜单回到主菜单



进入 setup 程序之后，第一个屏幕就是主菜单。

## 主菜单

主菜单显示了 BIOS 所提供的设定项目类别。您可使用方向键选择不同的条目。对选定项目的提示信息显示在屏幕的底部。

## 子菜单

如果你发现在左边某一区域有向右的指针符号（如上图所示），这就意味此项附加了子菜单。选中此项，按下回车即可进入此选项子菜单。然后您可以使用控制键在子菜单直接移动并改变设定值。回到主菜单，按下`<Esc>`。

## 主题帮助

BIOS 设定程序提供了帮助屏幕。你可以通过简单地按下`<F1>`键从任何菜单中调出此帮助屏幕。此帮助屏幕列出了相应的键和可能的选择项目。按下`<Esc>`退出帮助屏。

## 4-2 BIOS 主界面

### Main (系统信息)

使用此菜单可查看 BIOS 信息，并设置 BIOS 语言、时间和日期。

### Advanced (高级 BIOS 设置)

使用此菜单可对系统的高级特征进行设定。

### Chipset (芯片组设置)

使用此菜单可以对芯片组性能进行相应的设定。

### Security (安全设定)

使用此菜单可以对 BIOS 密码进行相应的设定。

### Boot (启动设置)

使用此菜单可以对计算机启动设备进行相应的设定。

### C.Oclock (超频设置)

使用此菜单可以进行超频,优化系统的性能表现。

### Save & Exit (退出设置)

退出设置,包括保存退出/不保存退出/保存重启/不保存重启/载入优化缺省值等。

## 4-3 系统信息 (Main)



### System Date (日期)

设置日期，日期的格式为月/日/年。

- Month 月份，从 Jan. (一月) 到 Dec. (十二月)。
- Date 日期，从 1 到 31 可用数字键修改。
- Year 年，用户设定年份。

### System Time (时间)

设置时间，时间的格式为时/分/秒。

### System Language (语言)

设置 BIOS 语言，选项有：English、中文。

#### 4-4 高级 BIOS 设置 (Advanced)



##### CPU Configuration (CPU 设置)

###### CPU Flex Ratio Override

开启或关闭 CPU 超倍频。设定值有: Disabled、Enabled。

###### CPU Non-Turbo Ratio Settings

设置 CPU 倍频。

###### Intel(VMX) Virtualization Technology

开启或关闭 Intel 虚拟化技术。Intel 虚拟化技术让您可以在同一平台的独立数据分割区，执行多个操作系统和应用程序。设定值有: Disabled、Enabled。

###### Active Processor Cores

设置激活处理器核心个数。

###### Hyper-Threading

开启或关闭超线程技术。设定值有: Disabled、Enabled。

###### Voltage Optimization

设置 CPU 电压优化。设定值有: Disabled、Enabled、Auto。

## SATA And RST Configuration (SATA 设置)

### SATA Controller(S)

开启或关闭 SATA 控制器。设定值有：Enabled、Disabled。

### SATA Mode Selection

设置 SATA 控制器工作模式。设定值有：AHCI、Intel RST Premium With Intel Optane System Acceleration。

### SATA Controller Speed

设置 SATA 控制器工作模式。设定值有：Default、Gen1、Gen2、Gen3。

### SATA Port1–4

设置和显示 SATA1–4 接口的连接状况。

## ACPI Settings (ACPI 高级配置)

### Enable ACPI Auto Configuration

设置 ACPI 自动配置。开启此选项，则 ACPI 会打开所有支持的睡眠模式；关闭此选项，则会弹出以下选项：

### Enable Hibernation

开启或关闭操作系统睡眠功能。此选项仅对部分操作系统有效。

### ACPI Sleep State

选择 OS 下待机模式。设定值有：Suspend Disabled、S3 (Suspend to RAM)。

### RTC Wake

设置定时唤醒。设定值有：Disabled、Enabled。如果选“Enabled”，则会弹出具体唤醒时间的设置。以小时/分/秒的格式来表示。各项目合理的范围是：Hour/时(0–23), Minute/分(0–59), Second/秒(0–59)。

### State After G3

设置上电自动开机。设定值有：Always On (自动开机状态)、Always Off (关机状态)。

### Wake on LAN Enable

设置网络唤醒。设定值有：Disabled、Enabled。

### Super IO Configuration (IO 设置)

点击“Serial Port Configuration”选项，将出现以下两个子选项：

- Serial Port

启动和关闭串口控制器。设定值有：OFF、ON。

- Change Settings (更改设置)

此选项用来改变串口地址。

### Hardware Monitor (硬件监控)

- CPU Fan Smart Mode

CPU 风扇模式设置。设定值有：Full on Mode（全速模式）、Automatic Mode（自动模式）、Manual Mode（自定义模式）。

- SYS Fan Smart Mode

系统风扇模式设置。设定值有：Full on Mode（全速模式）、Automatic Mode（自动模式）、Manual Mode（自定义模式）。

- CPU Temperature

显示当前 CPU 运行的温度。

- SYS Temperature

显示当前系统运行的温度。

- CFAN Speed

显示当前 CPU 风扇运行的速度。

- SFAN Speed

显示当前系统风扇运行的速度。

- CPU/ DIMM /+12V/5VCC Voltage

显示当前“CPU 电压/内存电压/+12V/5VCC”的电压值。

### USB Configuration (USB 设置)

- Legacy USB Support

开启或关闭传统 USB 设备功能。传统 USB 就是老的 1.1USB 设备，USB 键盘和鼠标都属于传统 USB。使用 USB 键盘和鼠标时，此选项需设置为“Enabled”。设定值有：Enabled、Disabled、Auto。

XHCI Hand-off

本项目用来启动支持没有“XHCI hand-off”功能的操作系统。设定值有：Disabled、Enabled。

USB Mass Storage Driver Support

设置 USB 大容量存储器支持。设定值有：Disabled、Enabled。

Port 60/64 Emulation

开启或关闭 60/64 端口仿真支持。设定值有：Disabled、Enabled。

### CSM Configuration (CSM 设置)

CSM Support

设置开启或关闭 CSM 功能。CSM 的全名为“Compatibility support Module”，即兼容性支持模块。设定值有：Disabled、Enabled。设置为“Enabled”，用于支持中断、传统的 Option ROM、传统的非 UEFI 系统（比如 DOS）等。如果设置为“Disabled”，这些传统功能将不被支持，系统将只支持 UEFI。

Option ROM Messages

指定 Option ROM 设置显示模式。设定值有：Force BIOS (BIOS 强制模式)、Keep Current (保持当前)。

Boot option filter

在 CSM Support 选项设置为“Enabled”的前提下，用于设置可引导的存储设备格式为 UEFI 或传统的 Legacy 模式。设定值有：UEFI and Legacy、Legacy only、UEFI only。

PXE Boot Rom

设置 PXE 引导 ROM，控制 UEFI 和 Legacy PXE ROM 的执行。设定值有：Disabled、UEFI、Legacy。

Storage Rom

在 CSM Support 选项设置为“Enabled”的前提下，用于设置存储设备的 Option ROM 的格式为 UEFI 或 Legacy 模式，比如 RAID 的 Option ROM。设定值有：Disabled、UEFI、Legacy。

Video Rom

在 CSM Support 选项设置为“Enabled”的前提下，用于设置显示设备的 Option ROM 的格式为 UEFI 或 Legacy 模式，比如显卡的 VBIOS。设定值有：Disabled、UEFI、Legacy。

Other PCI devices

在 CSM Support 选项设置为“Enabled”的前提下，用于设置其他拥有 Option ROM 的 PCI 设备的 Option ROM 的格式为 UEFI 或 Legacy 模式。设定值有：Disabled、UEFI、Legacy。

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## 4-5 芯片组设置 (Chipset)

### System Agent (SA) Configuration (北桥设备配置)

Graphics Turbo IMON Current

设置显卡 Turbo IMON 电流值设置。设定值范围为 14~31。

Primary Display

设置主显示设备。设定值有：Auto（自动）、IGFX（集显）、PEG（独显）、PCI、SG。

Internal Graphics

设置开启或关闭板载集成显卡。 设定值有：Auto、Disabled、Enabled。

GTT Size

设置显存大小。设定值有：2MB、4MB、8MB。

IGFX Memory Size

设置集显容量。设定值有：64M、128M、256M、512M、1024M、2048M。

DVMT Total Gfx Mem

设置集显共享显存的总容量。设定值有：128MB、256MB、MAX。

### PCH Device Configuration (南桥设备配置)

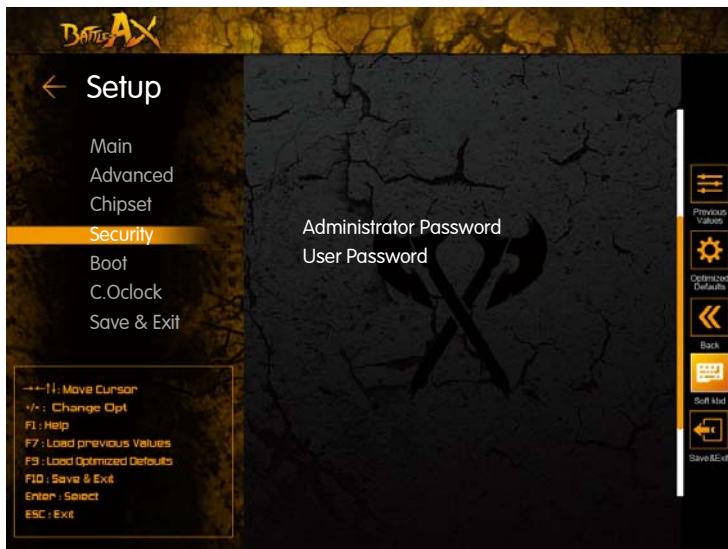
HD Audio Controller

开启或关闭高清音频控制器。设定值有：Disabled、Enabled、Auto。

PCH LAN Control

开启或关闭板载网卡控制器。设定值有：Disabled、Enabled。

## 4-6 安全设置 (Security)



### Administrator Password

本项目用于设置系统管理员密码。请按照下列步骤操作：

- 1. 选择“Administrator Password”项目并按下“Enter”键。
- 2. 当“Create New Password”窗口出现时，输入欲设置的密码，可以是六个字节内的英文、数字与符号，输入完成按下“Enter”键。
- 3. 按下“Enter”键后会出现“Confirm New Password”窗口，再一次输入密码以确认密码正确。若出现“Invalid Password”提示信息，代表于密码确认时输入错误，需重新操作。
- 若要更改系统管理员的密码，请依照上述程序再运行一次密码设置。
- 按“F10”键保存后退出，密码设置即可生效。

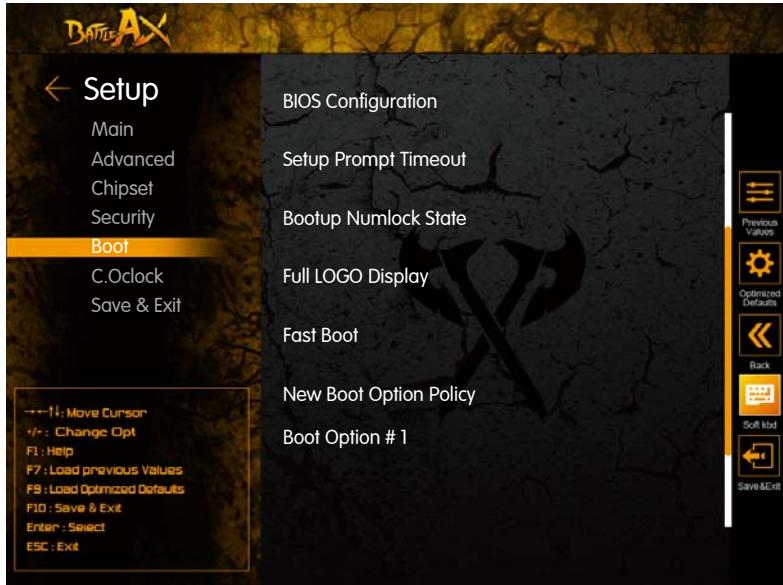
### User Password

在管理员密码设置成功后，会出现此选项，用于设置普通用户密码。选择“User Password”项目并按下“Enter”键。其余步骤，同管理员密码设置一样，请参照上面的操作步骤。



**注意：**有关管理员密码和用户密码：1. Supervisor password:能进入并修改 BIOS 设定程序。2. User password: 能进入，但无权修改部分 BIOS 设定程序。3. 若忘记设置的 BIOS 密码，可以清除 CMOS 来解决。

## 4-7 启动设置 (Boot)



### □ Setup Prompt Timeout

设置启动时屏幕提示等待时间（秒），需要键入秒数，“65535”表示无限期的等待。

### □ Bootup Numlock State

设置启动时小数字键盘状态，设定值有：On（开）、Off（关）。

### □ Full LOGO Display

设置开启或关闭全屏显示 Logo 功能。设定值有：On（开）、Off（关）。

### □ Fast Boot

设置开启或关闭快速启动功能。设置为“Enabled”后，系统会跳过一些检测项目，减少启动时间。设定值有：Disabled、Enabled。

### New Boot Option Policy ( 安装操作系统时的设置 )

启动设备优先权设置。如果用户要安装操作系统, 请把 “Boot Option # 1” 设为你的光驱设备(CD-ROM)或你的 U 盘设备(前提是你的光驱里面的光盘有操作系统或者是你的 U 盘里有 PE 系统), 设置完成后按 “F10” 键保存退出, 系统将从光驱或 U 盘启动。

## 4-8 超频设置 ( C.Oclock )

### Intel (R) SpeedStep (tm)

开启或关闭增强型英特尔节能技术。它是 Intel 推出的一种智能降频技术。它能够根据不同的系统工作量自动调节处理器的电压和频率, 以减少耗电量和发热量。超频时, 该选项需设置为 “Disabled”。设定值有: Disabled、Enabled。

### Memory Configuration ( 内存设置 )

#### OverClocking Feature ( 超频设置 )

开启或关闭超频设置。设定值有: Disabled、Enabled。当设置为 “Enabled” 时, 将会出现以下选项:

#### Memory Profile ( 内存参数设置 )

设置内存时序。设定值有: Default Profile ( 默认配置 )、Custom Profile ( 自定义设置, 选择此选项, 可以对内存进行超频设置 )、XMP Profile。XMP 全名为 “Extreme Memory Profile”, 它是英特尔提出的一种内存超频模式, 就是把内存的超频频率和参数设置以文件的方式存在内存条的 SPD 模块中。BIOS 启动 XMP 就是直接从 SPD 中读取超频设置参数设置内存频率。以下内容可作为超内存频率时参考使用:

#### Memory Frequency

设置内存频率。

#### tCL

此项控制了 C A S 延迟, 它决定了在 SDRAM 在接收指令后开始读取的延迟时间 (在时间周期中)。

#### tRCD/ tRP

设置控制 S D R A M 内存时钟周期数。

tRAS

此项控制 S D R A M 内存时钟周期数的 R A S 最小值。

tFAW

设置同一 rank 中允许同时发送大于四个行激活命令的间隔时间。

tRFC

该字段用于选择自动刷新周期时间。

tRRD

选择不同 b a n k 的列与列间的延迟时间。

tRTP

选择预充电时间。

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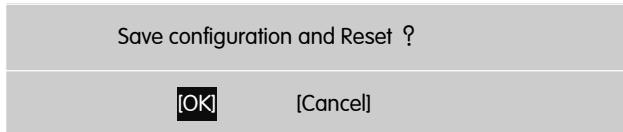
#### 4-9 退出设置

(Save & Exit)

退出选项包括：保存设置并重启/不保存并重启/保存/不保存/载入优化缺省值。

Save Changes and Reset (储存设置并重启)

若当你选择“Save Changes and Reset”，就会出现如下的信息：



➤ 选择“ok”并按下“Enter”键，即可储存所有设定结果并重启；  
若不想储存，选择“Cancel”或按“Esc”键皆可回到主菜单中。

# Chapter 5 English Introduction

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## 5-1 Introduction

Thanks for purchasing Colorful motherboard which provides excellent performance and quality assurance.

### 5-1-1 Motherboard features

BATTLE-AX B365M-HD PRO V21 motherboard based on Intel B365 chipset, support Intel LGA1151 Coffee Lake-S processors, support dual channel DDR4 2133/2400/2666MHz memory, support PCI-E3.0 standard.

The motherboard has 2\*DDR4 memory slots, 1\*HDMI port, 1\*DVI port, 1\*VGA port, 4\*SATA3.0 ports, onboard 6-channel audio chipset, integrated 1000M LAN chipset, it's a Cost-effective motherboard!

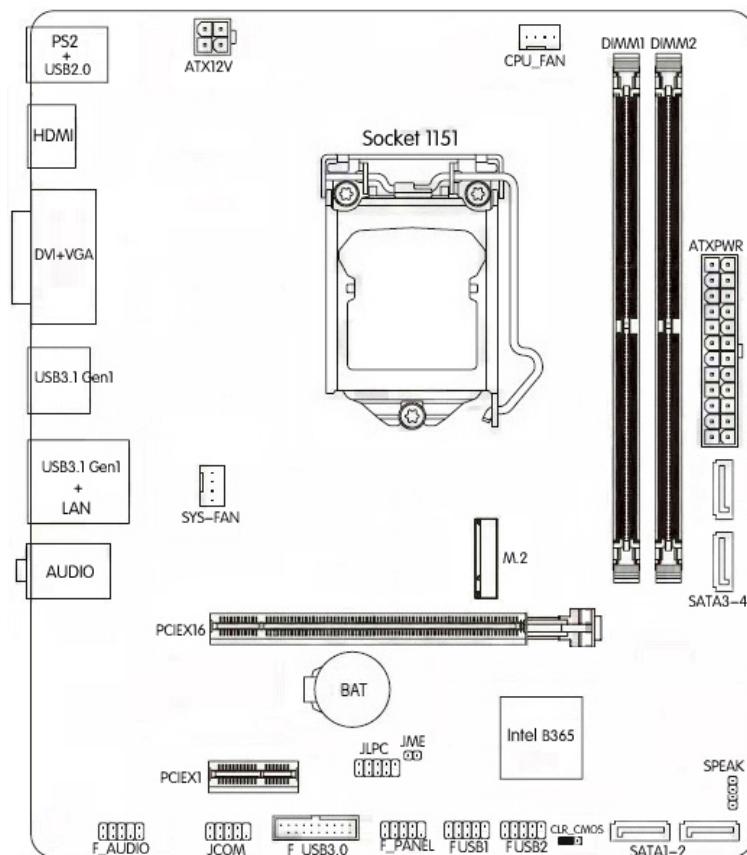
The motherboard has 1\*PCI Express3.0x16 slot, 1\*PCI Express3.0 x1 slot, 1\*M.2 slot, the extension pattern of this motherboard is diversity and the extension performance is strong!

### 5-1-2 motherboard specifications

- ❑ Form factor
  - mATX
- ❑ Chipset
  - Intel B365
- ❑ CPU
  - support Intel LGA1151 Coffee Lake-S processors
  - Tips: when using high power processor, please match the professional CPU cooling fan!
- ❑ Memory
  - Offer 2 DIMM slots
  - Support dual channel DDR4 2133/2400/2666MHz memory
- ❑ Slots
  - 1\*PCI Express 3.0x16 slot
  - 1\*PCI Express 3.0x1 slot
  - 1\*M.2 slot (Support PCI-e x4, NVME and Intel OPTANE)

- ❑ Storage
  - 4\*SATA3.0 6Gb/s ports
- ❑ 6-CH audio devices
  - Onboard 6-channel audio chipset
  - Support 3D surround sound effect
- ❑ LAN
  - integrated 1000M LAN chipset
  - Provides 10/100/1000Mb Ethernet
- ❑ USB ports
  - 6\*USB2.0 and 6\*USB3.1 Gen1 ports(include headers)
- ❑ Onboard header/jumper/button
  - 1\*9-pin Front panel audio connector ( F\_AUDIO )
  - 1\*System panel connector ( F\_PANEL )
  - 2\*USB2.0 header ( FUSB1,FUSB2 )
  - 1\*USB3.1 Gen1 header ( F\_USB3.0 )
  - 2\*CPU FAN ( CPU\_FAN, PCHFAN1 )
  - 1\*PC speaker connector ( SPEAK )
  - 1\*Debug header ( JLPC )
  - 1\*COM header ( JCOM )
  - 1\*Clear CMOS jumper ( CLR\_CMOS )
  - 1\*ME jumper ( JME )

### 5–1–3 motherboard Layout



### 5–2 Hardware Installation

This section will guide you through the installation of the motherboard. The topics covered in this section are:

- Preparing the motherboard
  - Installing the CPU
  - Installing the CPU fan

- Installing the memory
- Installing the motherboard
- Connecting cables and setting switches

### 5–2–1 Safety Instructions

To reduce the risk of fire, electric shock, and injury, always follow basic safety precautions.

Remember to remove power from your computer by disconnecting the AC main source before removing or installing any equipment from/to the computer chassis.

#### Installing the CPU

The motherboard shipped in the box does not contain a CPU or memory. You need to purchase a CPU, a CPU fan assembly, and memory to complete this installation.

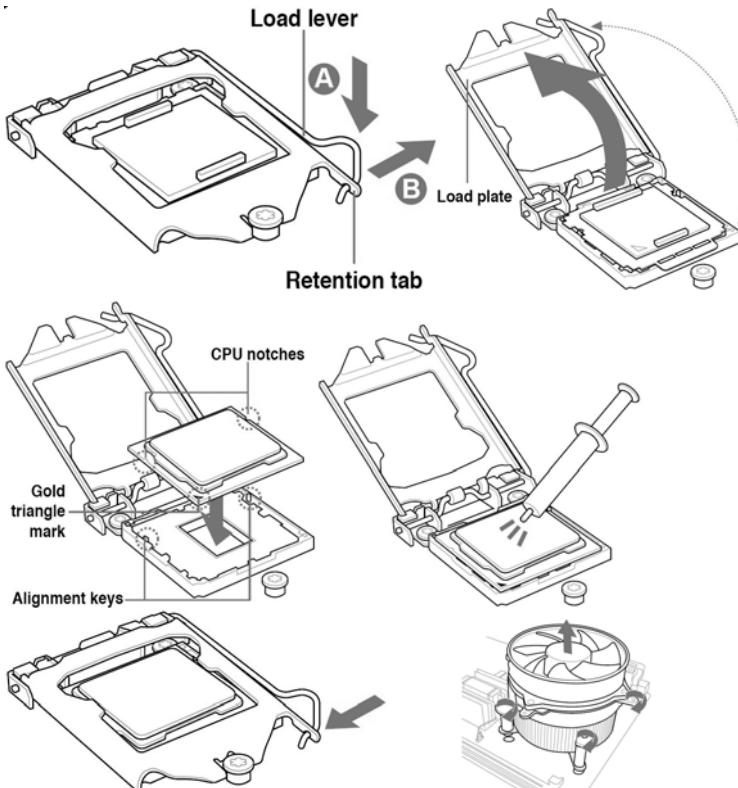
Be very careful when handling the CPU. Make sure not to bend or break any pins on the back. Hold the processor only by the edges and do not touch the bottom of the processor.

Use the following procedure to install the CPU onto the motherboard.

1. Unhook the socket lever by pushing down and away from the socket.
2. Lift the load plate. There is a protective socket cover on the load plate to protect the socket when there is no CPU installed.
3. Remove the protective socket cover from the load plate.
4. Remove the processor from its protective cover, making sure you hold it only by the edges.  
It is a good idea to save the cover so that whenever you remove the CPU, you have a safe place to store it.
5. Align the notches in the processor with the notches on the socket.
6. Lower the processor straight down into the socket with out tilting or sliding it into the socket

Make sure the CPU is fully seated and level in the socket.

7. Close the load plate over the CPU and press down while you close and engage the socket lever.
8. There are many different fan types that can be used with this motherboard. Follow the instruction that came with you fan assembly. Be sure that the fan orientation is correct for your chassis type and your fan assembly.
9. When using 95W CPU, Please match the radiator that is suitable for the CPU or with better heat dissipation.



The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU!

### Installing Memory DIMMs

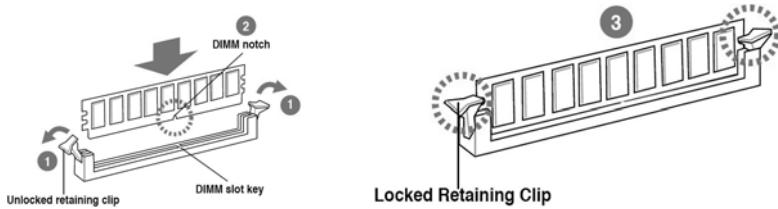
Your new motherboard has 2 slots for DDR4 memory. They support dual channel DDR4 memory technology. There must be at least one memory bank populated to ensure normal operation. Use the following the recommendations for installing memory.

- ✓ One DIMM: Install into DIMM1. You can install the DIMM into any slot, however, slot 1 is preferred.
- ✓ 2 DIMMs: Install into DIMM1&DIMM2 slot,to build dual channel.



Use the following procedure to install memory DIMMs into the slots on the motherboard. Note that there is only one gap near the center of the DIMM slot. This slot matches the slot on the memory DIMM to ensure the component is installed properly.

- ✓ Unlock a DIMM slot by pressing the module clips outward.
- ✓ Align the memory module to the DIMM slot, and insert the module vertically into the DIMM slot. The plastic clips at both sides of the DIMM slot automatically lock the DIMM into the connector.



## Installing the Motherboard

The sequence of installing the motherboard into the chassis depends on the chassis you are using and if you are replacing an existing motherboard or working with an empty chassis. Determine if it would be easier to make all the connections prior to this step or to secure the motherboard and then make all the connections. Use the following procedure to install the I/O shield and secure the motherboard into the chassis.

Be sure that the CPU fan assembly has enough clearance for the chassis covers to lock into place and for the expansion cards. Also make sure the CPU Fan assembly is aligned with the vents on the covers.

## Installing the I/O Shield

The motherboard kit comes with an I/O shield that is used to block radio frequency transmissions, protects internal components from dust and foreign objects, and promotes correct airflow within the chassis.

Before installing the motherboard, install the I/O shield from the inside of the chassis. Press the I/O shield into place and make sure it fits securely. If the

I/O shield does not fit into the chassis, you would need to obtain the proper size from the chassis supplier.

## Securing the Motherboard into the Chassis

Most computer chassis have a base with mounting studs or spacers to allow the mother board to be secured to the chassis and help to prevent short circuits. If there are studs that do not align with a mounting hole on the motherboard, it is recommended that you remove that stud to prevent the possibility of a short circuit.

1. Carefully place the motherboard onto the studs/spacers located inside the chassis.
2. Align the mounting holes with the studs/spacers.
3. Align the connectors to the I/O shield.
4. Ensure that the fan assembly is aligned with the chassis vents according to the fan assembly instruction.
5. Secure the motherboard with a minimum of eight-to-ten screws.

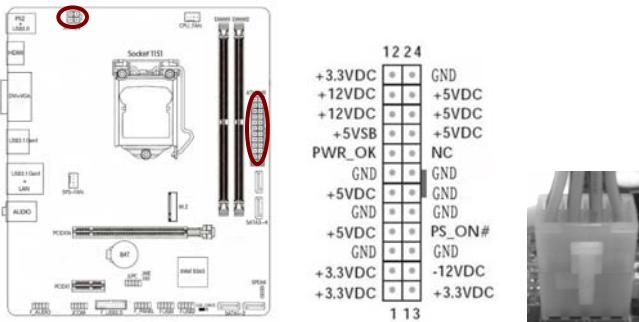
### 5–2–2 Connecting header and Setting Switches

This section takes you through all the connections and switch settings necessary on the motherboard. This will include:

- Power Connections
  - 24-pin ATX power
  - 4-pin ATX 12V power
- Internal Headers
  - Front panel
  - USB Headers
  - Audio
- Serial ATA III
- Chassis Fans
- Rear panel USB 2.0 Adapter
- Expansion slots

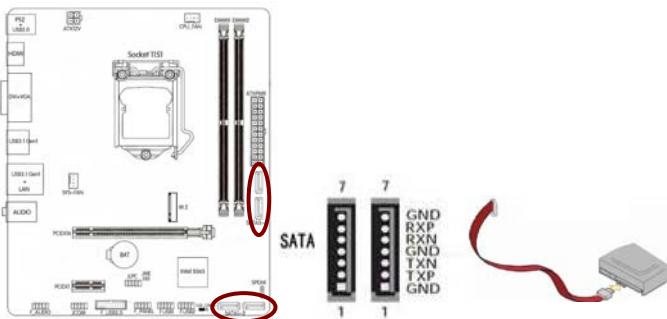
## ATX power connectors (24-pin ATXPWR, 4-pin ATX12V)

These connectors are for an ATX power supply. The plugs from the power supply are designed to fit these connectors in only one orientation. Find the proper orientation and push down firmly until the connectors completely fit.



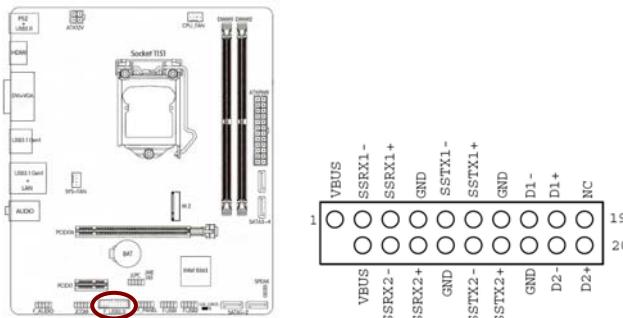
## Serial ATA 3.0 6Gb/s connectors (7-pin)

These connectors connect to Serial ATA 3.0 6Gb/s hard disk drives and optical drives via Serial ATA 3.0 6Gb/s signal cables.



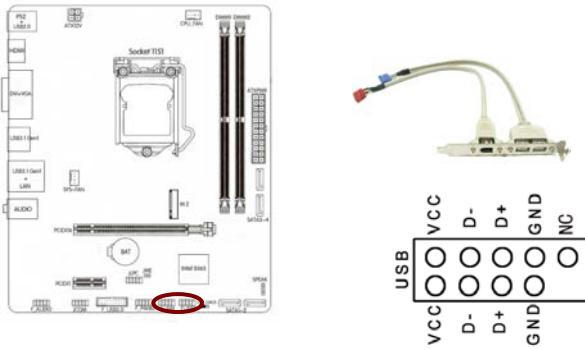
## USB 3.1 Gen1 connectors

This connector is for USB 3.1 Gen1 devices.



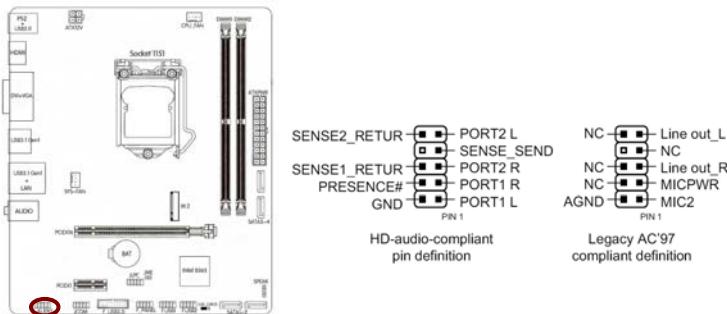
## USB 2.0 connectors

These connectors are for USB 2.0 ports. Connect the USB module cable to any of these connectors, then install the module to a slot opening at the back of the system chassis. These USB connectors comply with the USB 2.0 specification that supports up to 480Mbps connection speed.



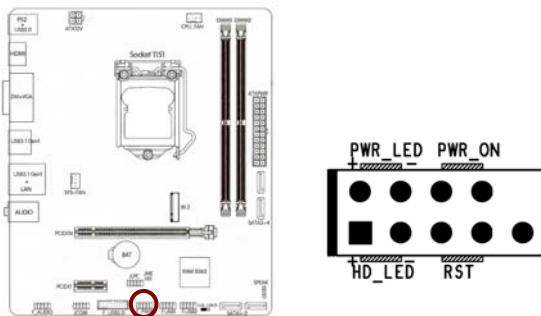
## Front panel audio connector

This connector is for a chassis-mounted front panel audio I/O module that supports either High Definition Audio or AC'97 audio standard. Connect one end of the front panel audio I/O module cable to this connector.



## System panel connector

This connector supports several chassis-mounted functions.



### System power LED (2-pin PLED)

This 2-pin connector is for the system power LED. Connect the chassis power LED cable to this connector. The system power LED lights up when you turn on the system power, and blinks when the system is in sleep mode.

### Hard disk drive activity LED (2-pin IDE\_LED)

This 2-pin connector is for the HDD Activity LED. Connect the HDD Activity LED cable to this connector. The IDE LED lights up or flashes when data is read from or written to the HDD.

### System warning speaker (4-pin SPEAKER)

This 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings.

ATX power button/soft-off button (2-pin PWRSW)

This 2-pin connector is for the system power button.

Reset button (2-pin RESET)

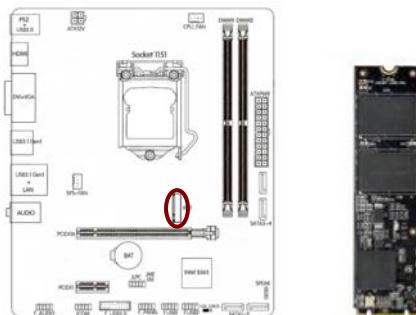
This 2-pin connector is for the chassis-mounted reset button for system reboot without turning off the system power.

## M.2 Slot

The motherboard has one M.2 slot , supports PCI-e X4 and Intel OPTANE, and supports the 2242/2260/2280specification, the data transfer rate can be as high as 32Gb/s.

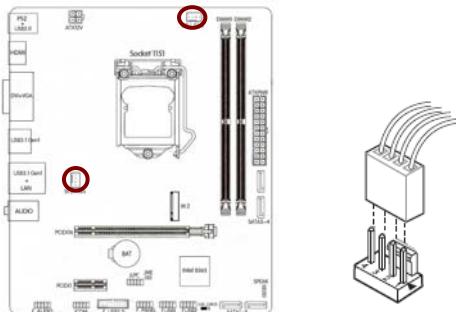
Please install M.2 SSD correctly in the slot following the following steps:

1. please use a screwdriver to remove the screws and studs in order, and then lock the stud first when the actual M.2 SSD is found to be suitable for the screw hole position.
2. insert the M.2 SSD into the slot in a inclined angle.
3. press M.2 SSD, then lock the screw.



## CPU、Chassis and Power fan connectors (CPU\_FAN,SYS\_FAN)

Connect the fan cables to the fan connectors on the motherboard, making sure that the black wire of each cable matches the ground pin of the connector.



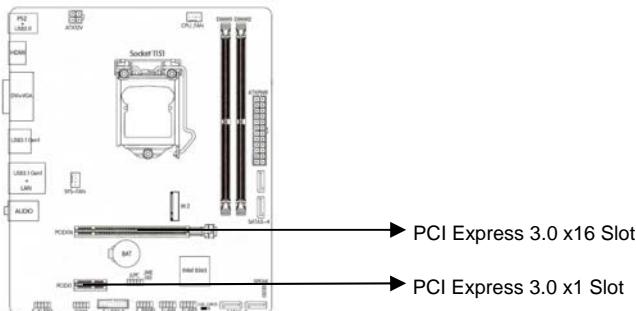
## PCI Express 3.0 x1 Slot

The PCI Express3.0 x1 slots that are designed to accommodate less bandwidth-intensive cards, such as a modem or LAN card.

## PCI Express 3.0 x16 Slots

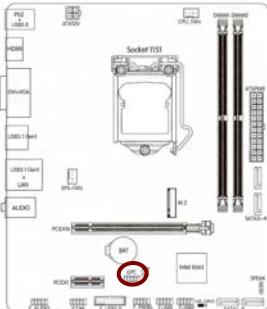
The PCI Express3.0 x16 slot is reserved for a graphics or video card. The bandwidth of the x16 slot is up to 4GB/sec(8GB/sec concurrent).

When installing a PCI Express x16 card, be sure the retention clip snaps and locks the card into place. If the card is not seated properly, it could cause a short across the pins. Secure the card's metal bracket to the chassis back panel with the screw used to hold the blank cover.



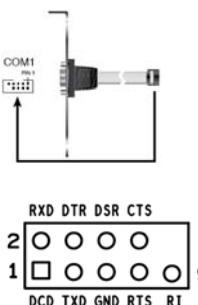
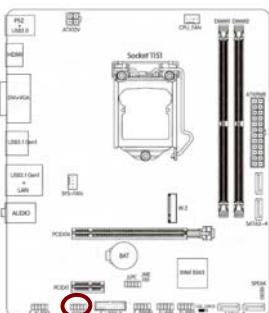
## Debug header: JLPC

This Debug header is for Debug serial devices



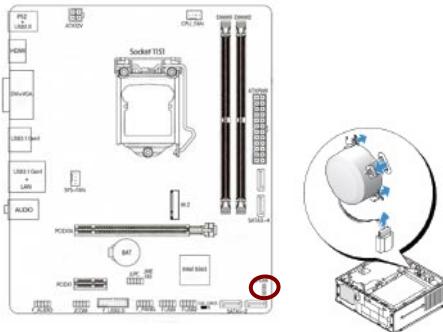
## COM header: JCOM

This COM header is for COM serial devices



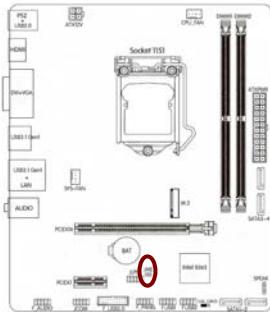
## SPEAK header:SPEAK

This SPEAK header is for Speaker serial devices



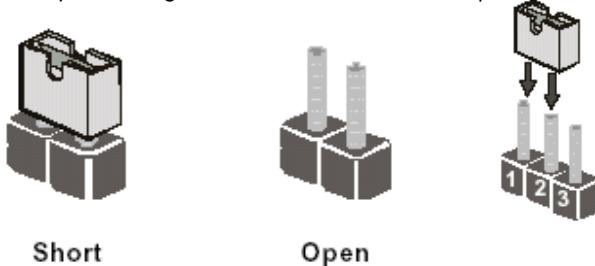
## ME header:JME

Intel Management Engine Interface,it is Intel management engine driven, is a heat management driver launched by Intel for its desktop series chipset.When you start the machine, Using a jumper cap or a metal short JME header in seconds, the ME program will be brushed and written.



## Clear CMOS Jumper: CLR\_CMOS

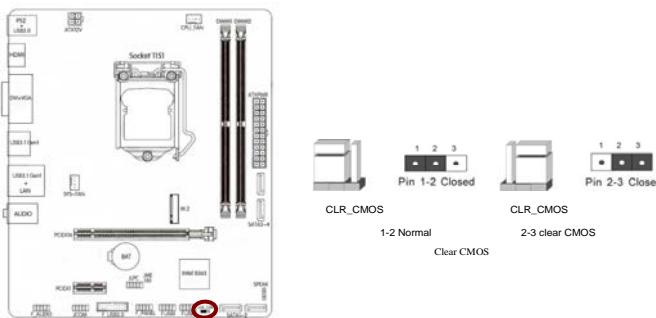
There is a CMOS RAM on board that has a power supply from external battery to keep the system configuration data. With the CMOS RAM, the system can automatically boot OS every time it is turned on. If you want to clear the system configuration, use the CLR\_CMOS Jumper to clear data.



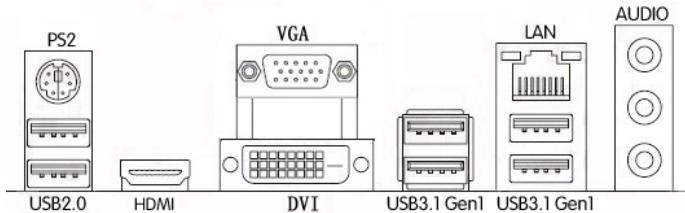
## Clear CMOS PROCEDURE

You can clear CMOS by shorting 2–3 pin. Before you clearing the CMOS, following next procedure:

- 1、Turn off the AC power supply and connect pins 2 and 3 together using the jumper cap.
- 2、Return the jumper setting to normal (pin 1–2) or Remove the jumper cap
- 3、Turn the AC power supply back on.



### 5–2–3 Back Panel IO Connector



<The back panel IO connector of BATTLE-AX B365M-HD PRO V21>

Parts	Use
PS/2 Mouse/ Keyboard Connector	This connector is for a PS/2 mouse/Keyboard.
LAN Jack	The standard RJ-45 jack is for connection to single Local Area Network (LAN). You can connect a network cable to it.
Line-In(Blue)	Used for external CD player, tape player or other audio devices.
Line Out(Green)	This connector for speakers or headphones.
Side R/L(Gray)	Side surround speakers connector
VGA	Onboard VGA port, connect to VGA Monitor
DVI	Onboard DVI port, connect to DVI Monitor
HDMI	Onboard HDMI port, connect to HDMI Monitor
USB Ports	These connectors are for attaching USB devices such as keyboard, mouse, or other USB-compatible devices.

## 5-3 BIOS Setting

This chapter introduces how to change the system settings through BIOS settings.  
Please refer to this chapter for details.

The chapter contains the following:

- Main ( System Information )
- Advanced ( Advanced BIOS Features )
- Chipset ( Chipset Settings )
- Security ( Security Settings )
- Boot ( Startup Settings )
- C.Oclock ( OverClock Settings )
- Save & Exit ( Exit Settings)

### 5-3-1 Enter BIOS Main Menu

BIOS (Basic Input and Output System) records hardware parameters of the system in the CMOS on the motherboard. Its major functions include conducting the Power-On Self-Test (POST) during system startup, saving system parameters and loading operating system, etc.

When computer startup, and then enter the boot self test (POST) program, if there are any errors will be shown the following information:

**Press DEL to enter Setup**

(Press the <DEL> key to enter BIOS Setup)



- If the boot self test (POST) program information is disappeared before you respond, you can turn it off and then turn on, or press the Reset button on the chassis to restart your computer, can also press < Ctrl > + < Alt > + < Delete > to restart the computer.
- Since the BIOS version of the motherboard is constantly upgrading, the BIOS description is only for reference.

### BIOS Setup Program Function Keys

- < ↑ ↓ ← → > Move the selection bar to select a setup menu
- < Enter > Execute command or enter a menu
- < +/PU > Increase the value or change the selection
- < -/PD > Reduce the value or change the selection
- < F1 > Help topic(Only the status display menu and select Settings menu are valid)
- < F7> Restore the previous CMOS settings
- < F9> Load Optimized Defaults
- < F10 > Save all the changes and exit the BIOS setup program
- < Esc > Main Menu: Exit the BIOS Setup program  
Submenus: Exit current submenu



After entering the setup program, the first screen is the main menu

### Main menu

The main menu shows the set item category provided by BIOS. You can use the direction key to select different items. The hint information for the selected project is displayed at the bottom of the screen.

### Submenu

If you find a pointer to the right in a region on the left (as shown in the figure above), this means that this item is attached to the submenu. Select this item, press the return to enter this option submenu. Then you can use the control key to move directly in the submenu and change the set value. Go back to the main menu and press <Esc>.

### Thematic help

The BIOS setup program provides a help screen. You can adjust the help screen from any menu by simply pressing the <F1> key. This help screen lists the corresponding keys and possible selection items. Press <Esc> to exit the help screen.

## 5–3–2 BIOS Main Menu

### Main ( System Information )

Using this menu to view BIOS information and set up BIOS language, time and date.

### Advanced ( Advanced BIOS Features )

Using this menu to set up the advanced features of the system.

### Chipset ( Chipset Settings )

Using this menu to set corresponding settings for the chipset performance.

### Boot ( Startup Settings )

Using this menu to set corresponding settings for the computer boot device.

### Security ( Security Settings )

Using this menu to set corresponding settings the BIOS password accordingly.

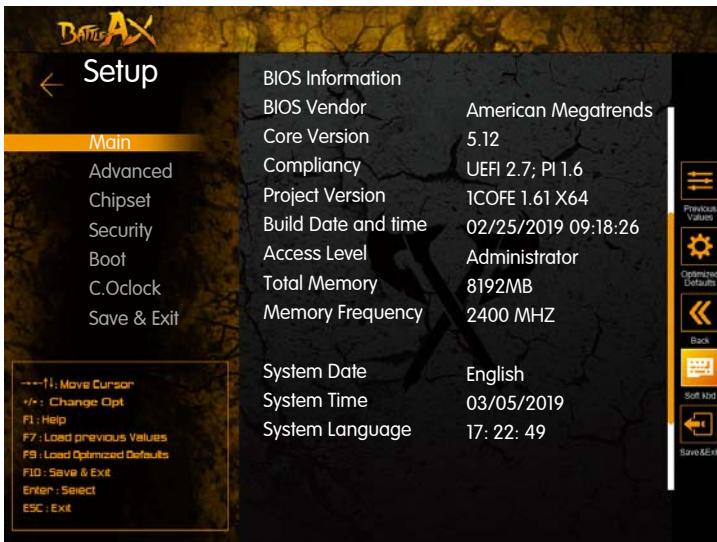
### □ C.Oclock ( OverClock Settings )

This menu can be used to overclock and optimize the performance of the system.

### □ Save & Exit ( Exit Settings )

Exit settings include saving and exiting, no saving and exiting, saving and restarting, no saving restart, loading optimized default values, etc.

## 5-3-3 Main ( System Information )



### System Date

Set the date, the date format is <month><date><year>

- Month:from Jan.to Dec.
- Date:from 1 to 31,can be modified with numeric keys
- Year:user set the year fields

### System Time

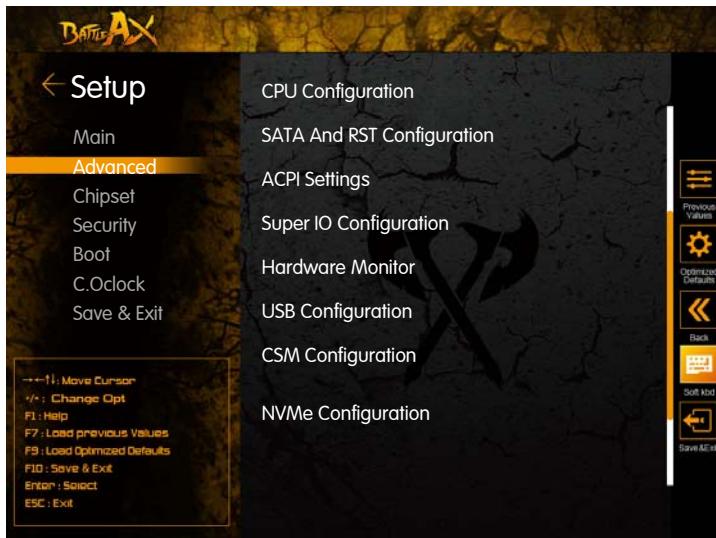
Set the time , the time format is<hour><minute><second>

## System Language

Selects the default language used by the BIOS.

Options: English, Chinese.

## 5–3–4 Advanced ( Advanced BIOS Features )



### CPU Configuration (CPU settings)

#### CPU Flex Ratio Override

Open or close CPU frequency doubling. Options: Disabled, Enabled.

#### CPU Non-Turbo Ratio Settings

Set CPU frequency doubling.

#### Intel (VMX) Virtualization Technology

Open or close the Intel virtualization technology. Intel virtualization technology enables you to execute multiple operating systems and applications on separate data partition of the same platform. Options: Disabled, Enabled.

#### Active Processor Cores

Set the number of the core of the activation processor.

Hyper-Threading

Open or close Hyper-Threading. Options: Disabled, Enabled.

Voltage Optimization

Set CPU voltage optimization. Options: Disabled, Enabled, Auto.

### SATA And RST Configuration (SATA settings)

SATA Controller (S)

Open or close the SATA controller. Options: Enabled, Disabled.

SATA Mode Selection

Set up the SATA controller working mode. Options AHCI、Intel RST Premium With Intel Optane System Acceleration.

SATA Controller Speed

Set the speed of the SATA controller. Options: Default, Gen1, Gen2, Gen3.

SATA Port1–4

This option displays the connection status of the SATA1–4.

### ACPI Settings (advanced configuration of ACPI)

Enable ACPI Auto Configuration

Set the ACPI auto configuration. If you open this option, ACPI will open all supported sleep modes. If you close this option, you will play the following options.

Enable Hibernation

Opening or closing the operating system's sleep function. This option is only valid for a part of the operating system.

These Lock legacy Resources

ACPI Sleep State

Select the standby mode under OS. Options: Suspend Disabled, S3 (Suspend to RAM).

RTC Wake

Set up the system wake-up. Options: Disabled, Fixed Time (timing), Dynamic Time (dynamic time). When the "Fixed Time" is selected, the setting of the specific wake-up time will be popped. In the format of hours / minutes / seconds. The reasonable scope of each project is: Hour/ (0–23), Minute/ (0–59), Second/ sec (0–59).

State After G3

Set up power-on automatic boot-up.Options: Always On ( Automatic boot-up state ) ,Always Off ( Shutdown state )

 Wake on LAN Enable

Set up network wake-up. Options: Disabled, Enabled.

### Super IO Configuration (IO setting)

Click on the "Serial Port Configuration" option, the following two sub options will appear.

 Serial Port

Start and close the serial port controller. Options: OFF, ON.

 Change Settings (change)

This option is used to change the serial port address.

### Hardware Monitor (hardware monitoring)

 CPU Fan Smart Mode

Set the CPU FAN mode.Options:Full on Mode,Automatic Mode,Manual Mode.

 SYS Fan Smart Mode

Set the SYS FAN mode.Options:Full on Mode,Automatic Mode,Manual Mode.

 CPU Temperature

Display the temperature of the current "CPU".

 SYS Temperature

Display the temperature of the current "SYSTEM".

 CFAN Speed

Show the speed of current CPU fan.

 SFAN Speed

Show the speed of current system fan.

 CPU/DIMM/+12V/5VCC Voltage

The current CPU voltage / memory voltage / +12V/5VCC voltage is displayed.

### USB Configuration (USB settings)

#### Legacy USB Support

Set up or close the traditional USB device function. The traditional USB is the old 1.1USB device, and USB keyboard and mouse belong to the traditional USB. When using USB keyboard and mouse, this option needs to be set to "Enabled". Options: Enabled, Disabled, Auto.

#### XHCI Hand-off

This project is used to start the operation system supporting the function of "XHCI hand-off". Options: Disabled, Enabled.

#### USB Mass Storage Driver Support

Set up USB large capacity memory support. Options: Disabled, Enabled.

#### Port 60/64 Emulation

Set up or close the port 60/64 emulation support. Options: Disabled, Enabled.

### CSM Configuration (CSM settings)

#### CSM Support

Set up or close the CSM function. The full name of CSM is "Compatibility support Module", that is compatibility support module. Options: Disabled, Enabled. Set to "Enabled" to support interruptions, traditional Option ROM and traditional non UEFI systems, such as DOS. If set to "Disabled", these traditional functions will not be supported, and the system will only support UEFI.

#### Option ROM Messages

Specify Option ROM to set display mode. Options: Force BIOS (BIOS mandatory mode), Keep Current (keep current)

#### Boot option filter

Under the premise of setting the CSM Support option to "Enabled", it is used to set the bootable storage device format to UEFI or traditional Legacy mode. Options: UEFI and Legacy, Legacy only, UEFI only.

#### PXE Boot Rom

Set up PXE boot ROM to control the execution of UEFI and Legacy PXE ROM. Options: Disabled, UEFI, Legacy.

Storage Rom

Under the premise of the CSM Support option set to "Enabled", the Option ROM used to set up the storage device is in the UEFI or Legacy mode, such as the Option ROM of RAID. Options: Do not launch, UEFI, Legacy.

 Video Rom

Under the premise that the CSM Support option is set to "Enabled", the Option ROM used to set up the display device is a UEFI or Legacy mode, such as the VBIOS of the graphics card. Options: Do not launch, UEFI, Legacy.

 Other PCI devices

Under the premise of setting the CSM Support option to "Enabled", the Option ROM used to set up other PCI devices with Option ROM is UEFI or Legacy mode. Options: Do not launch, UEFI, Legacy.

### 5-3-5 Chipset (chipset settings)

#### System Agent (SA) Configuration (North Bridge configuration)

 Graphics Turbo IMON Current

Set the Turbo IMON current value of the graphics card.

The setting range is 14–31.

 Primary Display

Set up the main display device. Options: Auto (automatic), IGFX (set explicit) and PEG (Du Xian).

 Internal Graphics

Set up or close the board integrated graphics card. Options: Auto, Disabled, Enabled.

 GTT Size

Set the size of Display Memory. Options: 2MB, 4MB, 8MB.

 IGFX Memory Size

Set IGFX memory size. Options: 32M, 64M, 128M, 256M, 512M, 1024M.

 DVMT Total GFX Mem

Set the total capacity of shared memory for integrated graphics cards. Options: 128MB, 256MB, MAX.

### PCH Device Configuration (South Bridge Configuration)

#### HD Audio Controller

Open or close a high fidelity audio controller. Options: Disabled, Enabled, Auto.

#### PCH LAN Control

Open or close PCH LAN controller. Options: Enabled, Disabled.

### 5-3-6 Security (security settings)



#### Administrator Password

This project is used to set the password of the system administrator. Please follow the following steps:

- 1.select the "Administrator Password" project and press the "Enter" key.
- 2.when the "Create New Password" window appears, the password you want to set in the input can be in English, digits and symbols within six bytes, and the input is completed by pressing the "Enter" key.
- 3.when the "Enter" key is pressed, the "Confirm New Password" window will appear, and again the password is entered to confirm the correct password. If the "Invalid Password" prompt information is presented, a

mistake is entered when the password is confirmed, and reoperation is required.

- ❑ 4. if you want to change the password of the system administrator, please run the password settings again according to the above program.
- ❑ 5. press the "F10" key to save and exit, password settings can be effective.

#### User Password

After the administrator password is set up successfully, this option will appear to set the ordinary user password. Select "User Password" item and press the "Enter" key. The rest of the steps are the same as the administrator password settings.

**Note:** the administrator password and user password: 1. Supervisor password: can enter and modify the BIOS setup program. 2. User password: can enter, but has no right to modify part of BIOS setup program. 3., if you forget to set the BIOS password, you can clear the CMOS to solve it.



### 5-3-7 Boot ( Startup Settings )



#### Setup Prompt Timeout

Set the start time screen hint waiting time (seconds), you need to type the number of seconds, "65535" indicates an indefinite wait.

#### Bootup Numlock State

Set up the state of small numeric keypad at startup. The setting values are On (open) and Off (pass).

#### Full Logo Display

Set up or close full screen display Logo function. Options: On (open), Off (close).

#### Fast Boot

Set up or close the quick start function. After setting to Enabled, the system will skip over some testing items and reduce startup time. Options: Disabled, Enabled.

### New Boot Option Policy(Setting up when the operating system is installed)

Boot device priority settings.If the user wants to install the operating system, please set "Boot Option #1" as your drive device (CD-ROM) or your U disk device (provided that your CD-ROM drive has an operating system or your U disk has an PE system). When setup is complete, press the "F10" key to save and exit. The system will boot from your drive or U disk.

### 5–3–8 C.Oclock ( OverClock Settings )

#### Intel (R) SpeedStep (tm)

Turn on or off Enhanced Intel Energy Saving Technology. It is an intelligent frequency reduction technology developed by Intel. It can automatically adjust the voltage and frequency of the processor according to the workload of different systems to reduce power consumption and calorific value. When overclocking, this option needs to be set to "Disabled". Options: Enabled, Disabled.

#### Turbo Mode

Turn on or off Turbo Mode.Options: Enabled, Disabled.

### Memory Configuration ( Memory overclocking function settings )

#### OverClocking Feature

Turn on or off overclocking settings. Options:Disabled, Enabled. When set to "Enabled", the following options will appear:

#### Memory Profile (memory parameter setting)

Set the memory time sequence. Options: Default Profile (default configuration),XMP Profile1.The full name of XMP is Extreme Memory Profile, which is a memory overclocking mode proposed by Intel, it stores the overclocking frequency and parameter settings of memory in the SPD module of memory through file. BIOS starts XMP, which is to read the overclocking setting parameter from SPD directly and set the memory frequency.The following contents can be used as reference for super memory frequency.

#### Memory Frequency

Set memory frequency.

#### tCL.

This item controls the delay of C A S, which determines the delay time that SDRAM begins to read after receiving instructions. (in a time period).

tRCD/ tRP

Set the number of memory clocks to control the S D R A M.

tRAS

This is the minimum value of R A S that controls the number of memory cycles in S D R A M.

tFAW

The same rank is allowed to send more than four row activation intervals at the same time.

tRFC

This field is used to select the automatic refresh cycle time.

tRRD

Select the delay time between columns and columns of different B a n k.

tRTP

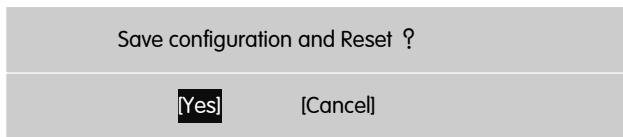
Select the precharge time.

### 5-3-9 Save & Exit ( Exit Settings )

The exit options include save settings and restart / do not save settings and restart /save/do not save/load and optimized defaults.

#### Save Changes and Reset

- If you select “Save Changes and Reset” ,the following message will appear:



- Select "Yes" and press the "Enter" button to store all the settings. If you don't want to save, select "Cancel" or press "Esc" to return to the main menu.

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If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Or our engineer, send the follow information to us!

Customer name\_\_\_\_\_ Purchase date\_\_\_\_\_

Contacts\_\_\_\_\_ Contact phone\_\_\_\_\_

Contact address\_\_\_\_\_ Product model\_\_\_\_\_

Product SN \_\_\_\_\_ Dealer name\_\_\_\_\_

Dealer phone \_\_\_\_\_ Dealer address\_\_\_\_\_

Website: [www.colorful.cn](http://www.colorful.cn)

Service hotline: +86400-678-5866