



QNAP

TS-431XeU

用户指南



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1. 前言





关于本指南

本指南提供有关 QNAP TS-431XeU NAS 的信息以及有关硬件安装的分步说明。此外，还提供了有关基本操作和故障排除信息的说明。

受众

本文档的目标读者为用户和存储管理员。本指南假定用户已对存储和备份概念有基本了解。

文档约定

符号	描述
	注释，提供默认配置设置和其他补充信息。
	重要注释，提供有关所需配置设置的信息以及其他关键信息。
	提示，提供有关执行任务或配置设置的建议或备选方法。
	警告，提供警告信息，如果忽略此信息，可能会导致潜在损失、伤害甚至死亡。

2. 产品概述

本章提供有关 QNAP TS-431XeU NAS 的基本信息。

关于 TS-431XeU

TS-431XeU 由 Annapurna Labs Alpine AL314 四核 1.7 GHz 处理器和 DDR3 RAM 提供支持。NAS 提供了四个可热插拔 SATA 6 Gbps 硬盘架，可支持机械硬盘和固态硬盘。TS-431XeU 还包含一个 10 GbE SFP+ 以太网端口、两个千兆位以太网端口和四个 USB 3.0 端口。

硬件规格










警告

如果您的 QNAP 产品有硬件方面的缺陷，请将产品退回 QNAP 或 QNAP 授权的服务中心进行维修或更换。您本人或未经授权的第三方对产品进行的任何维修或维护流程均会使保修失效。

对于因未经授权进行的修改和安装不受支持的第三方应用程序而造成的任何损坏或数据丢失，QNAP 概不负责。

有关详细信息，请参见 [QNAP 保修条款和条件](#)。

组件	TS-431XeU	
订购部件号	TS-431XeU-2G	TS-431XeU-8G
处理器		
CPU	Annapurna Labs Alpine AL-314	
频率	4 核 1.7 GHz	
架构	ARM 32 位	
加密引擎	AES-256	
内存		
预安装内存	2 GB RAM: 1 x 2 GB SODIMM DDR3	8 GB RAM: 1 x 8 GB SODIMM DDR3
内存插槽	1 x SODIMM  重要 请仅使用 QNAP 内存模块，以保证系统性能和稳定性。对于有多个内存插槽的 NAS 设备，请使用规格相同的 QNAP 模块。 使用不受支持的模块可能导致性能下降、引发错误或使操作系统无法启动。	
最大内存	8 GB RAM: 1 x 8 GB	
存储		
硬盘架	4 x 3.5 英寸 SATA 6 Gbps	
硬盘兼容性	<ul style="list-style-type: none"> • 3.5 英寸 SATA 机械硬盘 • 2.5 英寸 SATA 机械硬盘 • 2.5 英寸 SATA 固态硬盘 	
SSD 缓存加速支持	硬盘架 1 至 4	
热插拔	本设备对除 SSD 缓存硬盘外的硬盘支持热插拔。	
网络		

组件	TS-431XeU
10 Gb 以太网端口	1 x 10 GbE SFP+
千兆位以太网端口	2 x GbE RJ45
外部 I/O 端口和扩展插槽	
USB 端口	4 x USB 3.0 A 型
接口	
按钮	<ul style="list-style-type: none"> • 电源 • 重置
尺寸	
外形规格	1U 机架式
尺寸（高 x 宽 x 深）	44 x 439 x 291 mm 1.73 x 17.28 x 11.46 英寸
净重	4.15 kg（9.15 磅）
其他	
导轨兼容性	RAIL-B02  注 <ul style="list-style-type: none"> • 导轨套件未随 NAS 提供，必须单独购买。有关详细信息，请联系授权经销商或转到 http://shop.qnap.com。 • 有关导轨套件安装的信息，可在导轨套件包装随附的安装指南中找到。
电源单元	100W, 100-240V AC, 50/60Hz, 开放式
系统电池	CR2032 锂电池（3V, 225 mAh）  警告 为避免潜在的电池爆炸、导致人员受伤或组件受损，请确保使用同型电池更换现有电池。  重要 请按当地法规或电池制造商的指示处置使用过的电池。
噪声声级	20.3 dB  注 噪声声级在距 NAS 一米以内的旁观者位置测得。测试 NAS 安装了最大数量的硬盘以低速运行。
风扇	系统: 3 x 40 mm  警告  为避免潜在伤害或组件的损坏，NAS 连接电源时，切勿触及风扇。
工作温度	0°C 至 40°C（32 至 104°F）

组件	TS-431XeU
相对湿度	<ul style="list-style-type: none"> 无冷凝相对湿度：5% 至 95% 湿球温度：27°C (80.6°F)
安全锁孔	Kensington 安全锁孔
维护端口	1 x 3.5 mm 控制台端口



提示

型号规格如有更改，恕不另行通知。要查看最新规格，请转到 <https://www.qnap.com>。

包装内容

项目	数量
TS-431XeU NAS	1
电源线	1
以太网线	2 x 千兆位 RJ45
适用于 3.5 英寸硬盘的螺丝	16
适用于 2.5 英寸硬盘的螺丝	12
手柄套件	<ul style="list-style-type: none"> 2 x 手柄 2 x 角码 8 x 螺丝
快速安装指南 (QIG)	1

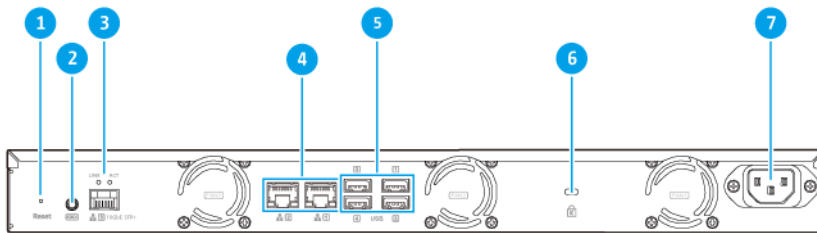
组件

前面板



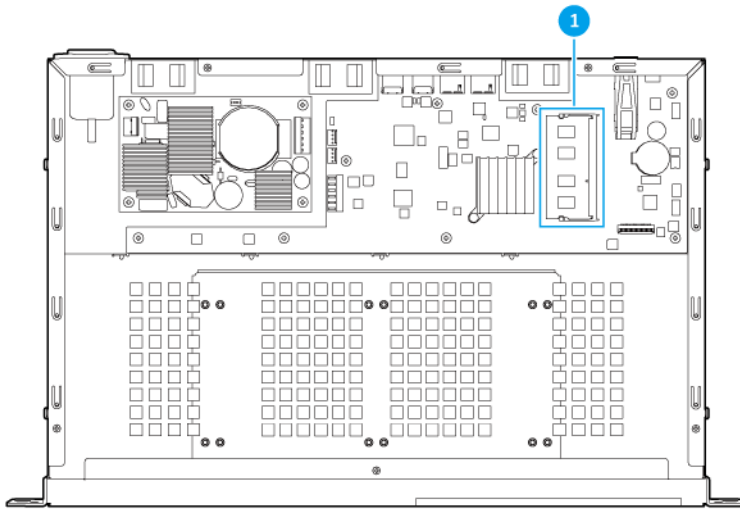
编号	组件	编号	组件
1	硬盘 LED	4	状态 LED
2	千兆位以太网 LED	5	电源按钮
3	10 Gb 以太网 LED	-	-

后面板



编号	组件	编号	组件
1	重置按钮	5	USB 3.0 A 型端口
2	维护端口	6	Kensington 安全锁孔
3	以太网端口(10 GbE SFP+)	7	电源输入
4	以太网端口 (GbE RJ45)	-	-

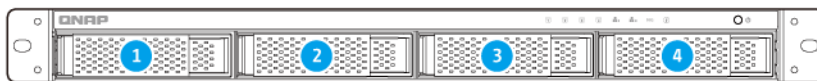
系统主板



注
图像不含外壳盖。

编号	组件	编号	组件
1	内存插槽	-	-

硬盘编号



安全信息

以下说明有助于确保个人安全和环境安全。在执行任何操作之前，请仔细阅读这些说明。

一般说明

- NAS 应存放在通过器具、锁和钥匙或任何安保措施限制进入的安全场所。
- 只有经过授权并掌握技能的合格人员才能实际接触 NAS，相关人员需了解所有限制措施、安全预防措施和安装维护流程。
- 为避免潜在伤害或组件的损坏，请务必等硬盘和其他内部系统组件冷却后再触碰。
- 请执行静电放电 (ESD) 规程，以避免可能的人员受伤或组件受损。

电源

- 为降低失火或触电风险，请确保只将电源线连接到接地良好的电源插座。



配备冗余电源的设备可能有一条或多条电源单元 (PSU) 线。为避免受到严重伤害，安装或更换系统组件前，必须由经培训的维修技师从设备拔下所有 PSU 线。

系统电池

- 为避免潜在的电池爆炸、导致人员受伤或组件受损，请确保使用同型电池更换现有电池。
- 请按当地法规或电池制造商的指示正确处置使用过的电池。

运动的部件



转动的风扇叶片： 在设备连接到电源时，使您的身体各部位远离正在转动的风扇叶片。



运动的组件： 使您的身体各部位远离正在运动的其他组件。

安装要求

类别	项目
环境	<ul style="list-style-type: none"> • 室温：0°C 至 40°C (32 至 104°F) • 无冷凝相对湿度：5% 至 95% • 湿球温度：27°C (80.6°F) • 平坦的防静电表面，无直射阳光、液体或化学药剂 • 无可能阻塞 NAS 通风或者压住 NAS 或电源线的物品

类别	项目
硬件和外围设备	<ul style="list-style-type: none"> • 存储硬盘 有关兼容硬盘的详细信息，请转到 https://www.qnap.com/compatibility/。 • 网线
工具	<ul style="list-style-type: none"> • 1 号或 2 号十字螺丝刀 • 防静电腕带

设置 NAS



重要

在设置 NAS 或安装 NAS 组件之前，请仔细阅读[安全信息](#)中的所有安全要求和信息。

1. 将 NAS 设备置于符合要求的环境中。
有关详细信息，请参见[安装要求](#)。
2. 将 NAS 安装在机架上。
有关详细信息，请参见以下主题：
 - [导轨套件](#)
 - [安装手柄](#)
3. 安装硬盘。
有关详细信息，请参见以下主题：
 - [安装 3.5 英寸硬盘](#)
 - [安装 2.5 英寸硬盘或固态硬盘](#)
4. 连接电源线和所有适用的线缆。
5. 启动 NAS 电源。
6. 安装 QTS。
有关详细信息，请参见 [QTS 安装](#)。
7. 登录 QTS。

3. 安装和配置

本章提供了具体的硬件和固件安装与配置步骤。

硬件安装

本节提供有关安装硬盘、内存模块、手柄和增加扩展单元的信息。

安装硬盘

TS-431XeU 兼容 3.5 英寸和 2.5 英寸硬盘以及固态硬盘。所有四个硬盘架均支持 SSD 缓存加速。

安装 3.5 英寸硬盘



警告

- 安装硬盘将删除硬盘上的所有数据。
- 请执行静电放电 (ESD) 规程，以避免组件损坏。

•



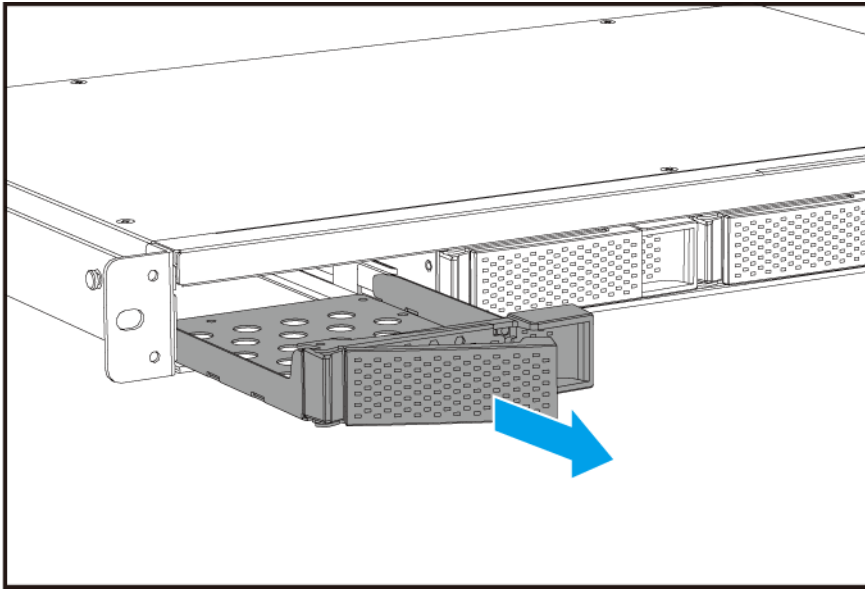
转动的风扇叶片：使您的双手和身体其他部位远离正在转动的风扇叶片。

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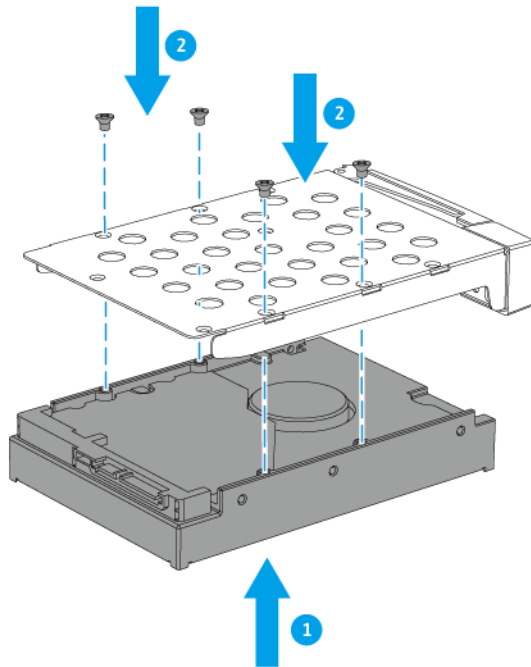


其他运动的组件：使您的双手和身体其他部位远离正在运动的其他组件。

1. 关闭 NAS 电源。
2. 取下硬盘托盘。
 - a. 向外拉动托盘手柄。
 - b. 拉出托盘。

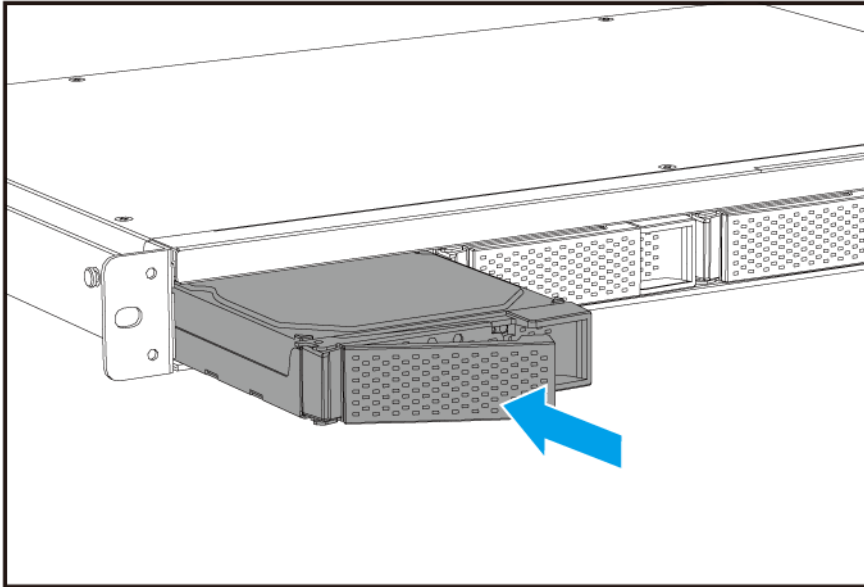


3. 将硬盘安装到托盘上。
 - a. 将托盘放在硬盘上，使托盘上的孔与硬盘上的孔对齐。
 - b. 装上螺丝，将硬盘锁定在托盘上。



4. 将托盘插入硬盘架。

- a. 将托盘滑入硬盘架。
- b. 将手柄推至锁定到位。



5. 启动 NAS 电源。

安装 2.5 英寸硬盘或固态硬盘



警告

- 安装硬盘将删除硬盘上的所有数据。
- 请执行静电放电 (ESD) 规程，以避免组件损坏。

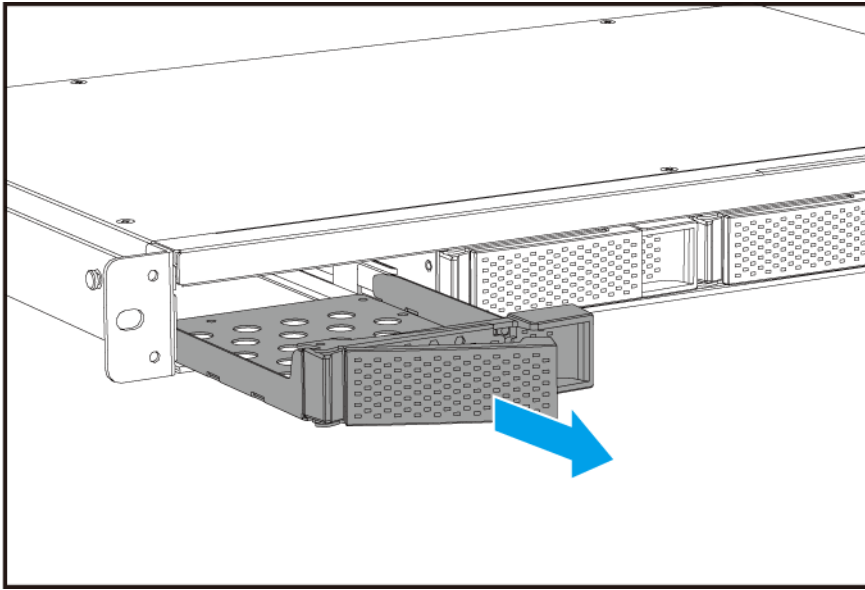


转动的风扇叶片：使您的双手和身体其他部位远离正在转动的风扇叶片。

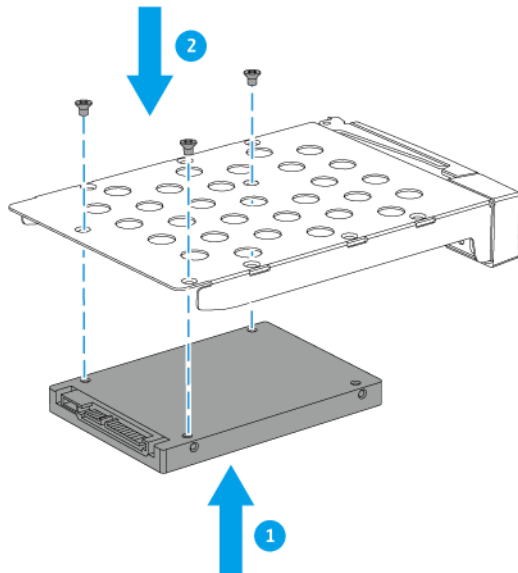


其他运动的组件：使您的双手和身体其他部位远离正在运动的其他组件。

1. 关闭 NAS 电源。
2. 取下硬盘托盘。
 - a. 向外拉动托盘手柄。
 - b. 拉出托盘。

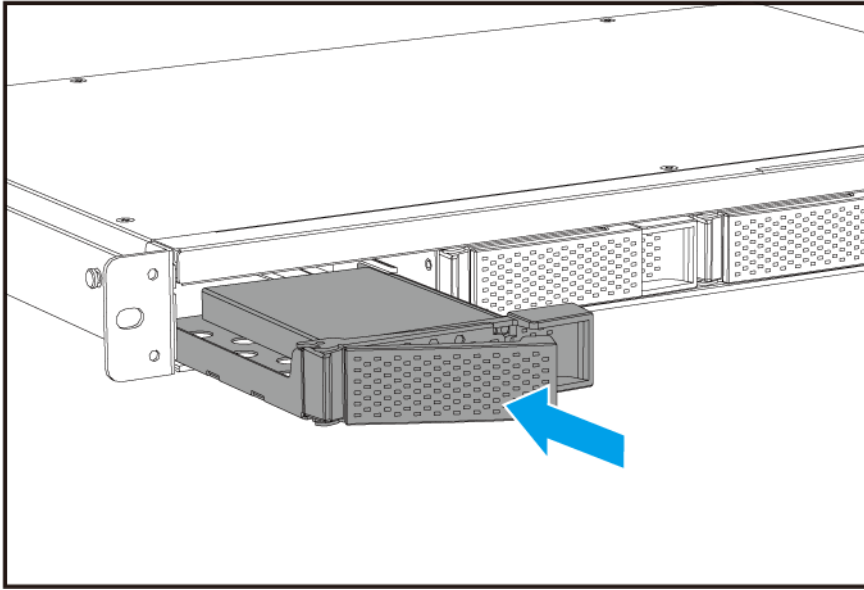


3. 将硬盘安装到托盘上。
 - a. 将托盘放在硬盘上，使托盘上的孔与硬盘上的孔对齐。
 - b. 装上螺丝，将硬盘锁定在托盘上。



4. 将托盘插入硬盘架。

- a. 将托盘滑入硬盘架。
- b. 将手柄推至锁定到位。



5. 启动 NAS 电源。

更换内存模块

NAS 有一个内存插槽。您可以通过升级内存模块来增加 NAS 的内存容量。

只能使用 QNAP 模块，以保持系统性能和稳定性。可以从授权经销商处购买 QNAP 内存模块。



警告

- 只有合格人员才能执行以下步骤。不遵守说明可能会导致重伤或死亡。
- 请执行静电放电 (ESD) 规程，以避免组件损坏。



转动的风扇叶片：使您的双手和身体其他部位远离正在转动的风扇叶片。

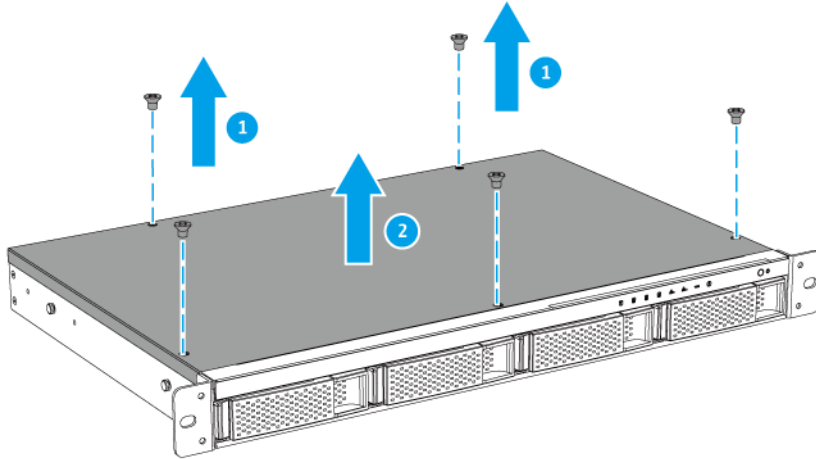


其他运动的组件：使您的双手和身体其他部位远离正在运动的其他组件。

1. 关闭 NAS 电源。
2. 从插座上拔下电源线。
3. 拔掉所有线缆和外接部件。

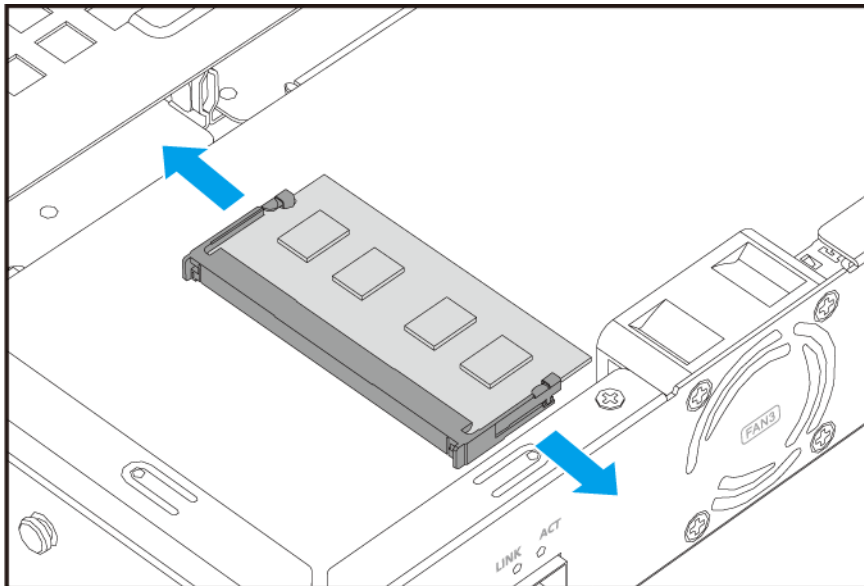
4. 取下外壳盖。

- a. 卸下用于将外壳盖固定到机箱的螺丝。
- b. 向上拉起外壳盖，使其完全脱离机箱。



5. 取下现有模块。

- a. 同时向外推动固定夹以释放模块。



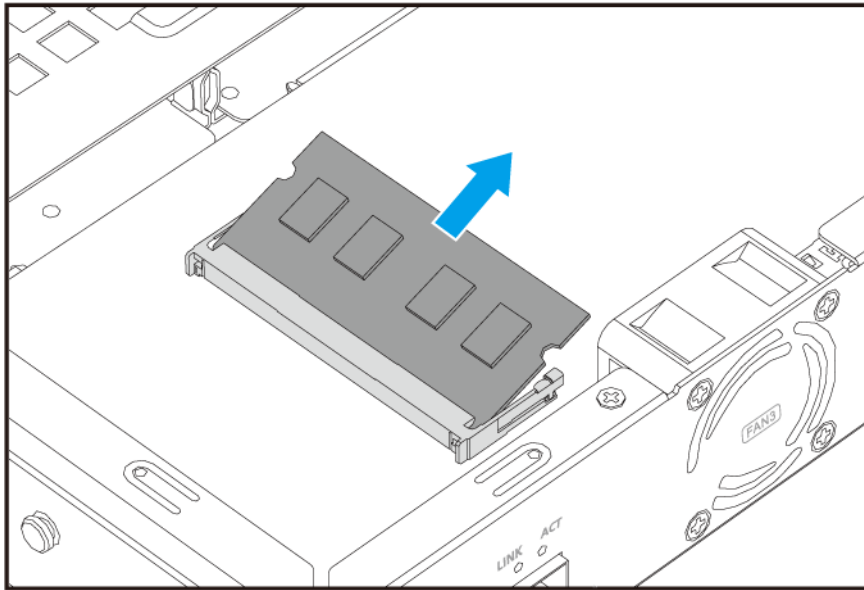
- b. 确认模块向上倾斜并已完全脱离插槽。



警告

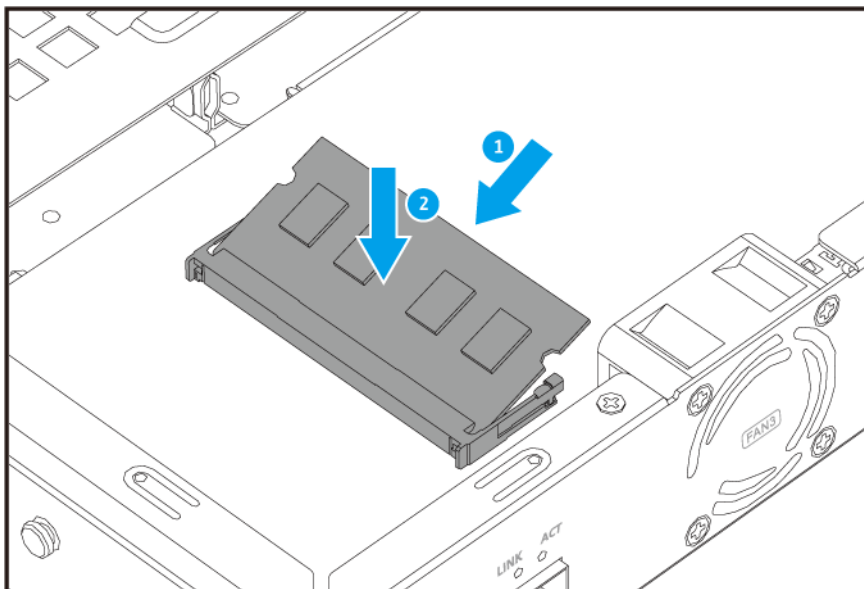
如果尝试在模块尚未完全脱离时将其取出，可能会损坏模块和主板。

- c. 握住模块边缘，然后小心地将其从插槽中滑出。



6. 安装新模块。

- a. 将凹口与插槽内的凸起对齐。
- b. 将模块插入插槽中。
- c. 确认金属接头已完全插入插槽中。
- d. 小心地向下按压模块，直到固定夹将模块锁定到位。



7. 安装外壳盖。

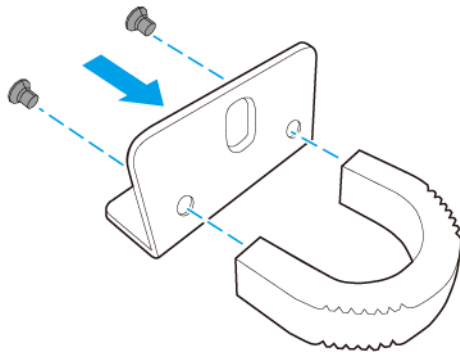
- a. 向下滑动外壳盖，使其完全触及机箱。
- b. 装上用于将外壳盖固定到机箱的螺丝。

8. 连接所有线缆和外接部件。
9. 启动 NAS 电源。
10. 确认 NAS 能够识别该模块。
 - a. 以管理员身份登录 QTS。
 - b. 转到**控制台 > 系统 > 系统状态 > 硬件信息**。
 - c. 检查**内存总容量**值。

安装手柄

安装手柄可以便于拿取和将 NAS 更牢固地固定在机架上。

1. 关闭 NAS 电源。
2. 将手柄安装到角码上。
 - a. 将手柄上的开孔对准角码上的两个圆螺丝孔。
 - b. 装上螺丝，将手柄固定在角码上。

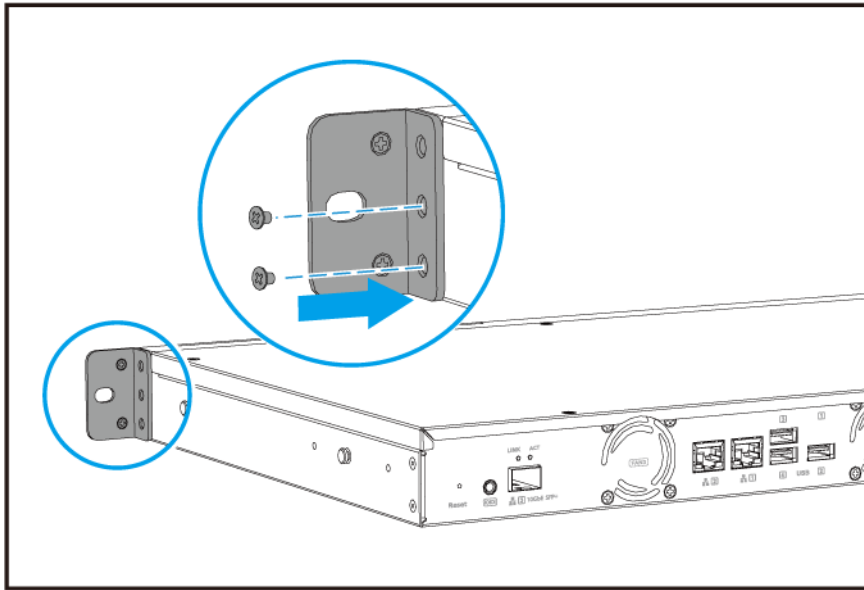


3. 将角码安装到 NAS 上。
 - a. 将角码上的孔对准机箱左侧的孔。



注
确保手柄与前面板朝向一致。

- b. 装上螺丝，将角码固定到机箱上。



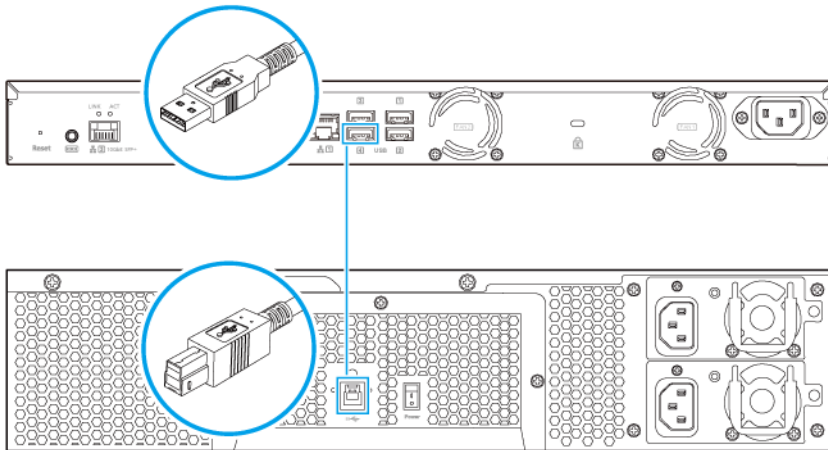
4. 将第二个手柄安装到机箱的另一侧。
5. 启动 NAS 电源。

添加 USB 扩展单元

TS-431XeU 支持连接一至两个 USB 扩展单元，视型号而定。您可以使用以下任何一种配置。

- 一个 UX-1200U-RP 单元
- 两个 UX-800U-RP 单元
- 一个 UX-1200U-RP 单元和一个 UX-800U-RP 单元

1. 将扩展单元连接到 NAS。
 - a. 将 USB 线缆连接到扩展单元上的 USB 3.0 B 型端口。
 - b. 将 USB 线缆连接到 NAS 上的 USB 3.0 A 型端口。



2. 为扩展单元接通电源。
3. 确认 NAS 能够识别扩展单元。
 - a. 以管理员身份登录 QTS。
 - b. 转到主菜单 > 存储空间总管 > 总览 > 系统。
 - c. 确认扩展单元已列出。

导轨套件

TS-431XeU 兼容以下型号：

- RAIL-B02

导轨套件未随 NAS 提供，必须单独购买。有关详细信息，请联系授权经销商或转到 <http://shop.qnap.com>。

安装信息位于导轨套件包中。

QTS 安装

TS-431XeU 采用 QNAP QTS 操作系统。可以使用以下任一方法安装 QTS。

方法	描述	要求
Qfinder Pro 安装 (推荐)	<p>如果 NAS 已连接到您的局域网，可以执行以下操作：</p> <ul style="list-style-type: none"> • 使用 Qfinder Pro 定位 NAS。 • 完成“智能安装指南”向导中的步骤。 <p>有关详细信息，请参见使用 Qfinder Pro 安装 QTS。</p>	<ul style="list-style-type: none"> • 计算机 • 网线 • Qfinder Pro 安装程序

方法	描述	要求
云安装	<p>如果 NAS 已连接到 Internet，可以执行以下操作：</p> <ul style="list-style-type: none"> • 扫描 NAS 上的二维码。 • 指定 Cloud Key。 • 登录您的 myQNAPcloud 帐户。 • 完成“智能安装指南”向导中的步骤。 <p>有关详细信息，请参见使用 Cloud Key 安装 QTS。</p>	<ul style="list-style-type: none"> • 计算机或移动设备 • 网线 • myQNAPcloud 帐户 • CloudKey

使用 Qfinder Pro 安装 QTS



警告

安装 QTS 将删除硬盘上的所有数据。请先备份您的数据，然后再继续。

1. 启动 NAS 电源。
2. 将 NAS 连接到您的局域网中。
3. 在已连接到同一局域网的计算机上运行 Qfinder Pro。



注

要下载 Qfinder Pro，请转到 <https://www.qnap.com/utilities>。

4. 在列表中找到 NAS，然后双击名称或 IP 地址。
5. 执行以下任一操作。
 - 要检查是否有可供使用的最新版本，单击**开始**。
向导会下载可供使用的最新版本，下载完成后，NAS 会重新启动。如果没有更新的版本，向导会自动显示**智能安装指南**。
 - 要安装立即可用的版本，单击**跳过**。
6. 单击**启动智能安装指南**。
7. 指定以下信息。
 - **NAS 名称**：指定 1 至 14 个字符的名称。名称支持字母（A 到 Z、a 到 z）、数字（0 到 9）和连字符 (-)，但不能以连字符结尾。
 - **密码**：指定 1 至 64 个字符的管理员密码。密码支持所有 ASCII 字符。
8. 单击**下一步**。
9. 指定时区、日期和时间。



提示

QNAP 建议连接到 NTP 服务器，以确保 NAS 遵循协调世界时 (UTC) 标准。

10. 单击**下一步**。

11. 选择**自动获取 IP 地址(DHCP)**。
12. 单击**下一步**。
13. 选择将用于访问 NAS 上共享文件夹的设备类型。
14. 单击**下一步**。
15. 检查设置。
16. 单击**应用**。
此时会出现确认消息。

**警告**

单击**确认**后，将先删除硬盘上的所有数据，然后再安装 QTS。

17. 单击**确认**。
QTS 即安装完毕。

使用 Cloud Key 安装 QTS

**警告**

安装 QTS 将删除硬盘上的所有数据。请先备份您的数据，然后再继续。

1. 启动 NAS 电源。
2. 将 NAS 连接到 Internet。
3. 使用以下方法之一转到“QNAP Cloud 安装”页面：
 - 在您的计算机上，转到 <http://install.qnap.com/>。
 - 使用移动设备扫描 NAS 上的二维码。

网页中会列出本地网络上所有尚未初始化的 QNAP NAS 设备。

4. 从列表中找到您的 NAS，然后单击**初始化**。

**注**

如果未列出您的 NAS，请按网页上的说明指定 NAS 上的 Cloud Key。

安装向导将在默认 Web 浏览器中打开。

5. 创建帐户或登录 myQNAPcloud。

**注**

创建帐户后，您必须返回此页面才能完成安装。

6. 为 NAS 指定 myQNAPcloud 设备名称。

**注**

- myQNAPcloud 设备名称用于远程访问 NAS。
- 因安全原因，在您的 NAS 上初始化 CloudLink 远程连接服务后，会将其禁用。通过 LAN 连接到 QTS，然后安装 CloudLink 可启用此服务。

7. 单击**下一步**。

8. 执行以下任一操作。

- 要检查是否有可供使用的最新版本，单击**开始**。
向导会下载可供使用的最新版本，下载完成后，NAS 会重新启动。如果没有更新的版本，向导会自动显示**智能安装指南**。
- 要安装立即可用的版本，单击**跳过**。

9. 单击**启动智能安装指南**。

10. 指定以下信息。

- **NAS 名称**：指定 1 至 14 个字符的名称。名称支持字母（A 到 Z、a 到 z）、数字（0 到 9）和连字符 (-)，但不能以连字符结尾。
- **密码**：指定 1 至 64 个字符的管理员密码。密码支持所有 ASCII 字符。

11. 单击**下一步**。

12. 指定时区、日期和时间。



提示

QNAP 建议连接到 NTP 服务器，以确保 NAS 遵循协调世界时 (UTC) 标准。

13. 单击**下一步**。

14. 选择**自动获取 IP 地址(DHCP)**。

15. 单击**下一步**。

16. 选择将用于访问 NAS 上共享文件夹的设备类型。

17. 单击**下一步**。

18. 检查设置。

19. 单击**应用**。
此时会出现确认消息。



警告

单击**确认**后，将先删除硬盘上的所有数据，然后再安装 QTS。

20. 单击**确认**。
QTS 即安装完毕。

4. 基本操作

本章介绍 NAS 的基本操作。

电源按钮

操作	用户操作	结果
启动电源	按下此按钮一次。	NAS 开机。
关闭电源	按住此按钮 1.5 秒钟。	NAS 关机。
强制关机	按住此按钮 5 秒钟。	NAS 关闭。



重要
仅当 NAS 无响应时才能使用此方法。

重置按钮

操作	用户操作	结果
基本系统重置	按住此按钮 3 秒钟。	<p>以下设置将重置为默认值：</p> <ul style="list-style-type: none"> • 系统管理员密码：admin • TCP/IP 配置： <ul style="list-style-type: none"> • 通过 DHCP 自动获取 IP 地址设置 • 禁用巨型帧 • 如果启用端口中继（仅限多局域网型号），则端口中继模式将重置为“主动备份(故障转移)”。 • 系统端口：8080（系统服务端口） • 安全等级：低（允许所有连接） • LCD 面板密码：（空白） • VLAN：禁用
高级系统重置	按住此按钮 15 秒钟。	<p>恢复默认出厂设置。</p> <ul style="list-style-type: none"> • 要在高级系统重置后检索旧数据，请在 NAS 上重新创建先前的文件夹结构。

LED

开启 NAS 电源后，LED 指示灯会指示系统状态和相关信息。以下 LED 信息仅适用于硬盘已正确安装并且 NAS 已连接到网络的情况。

有关 LED 位置的详细信息，请参见[组件](#)。

LED	状态	描述
状态	红绿交替闪烁，每秒 2 次	<ul style="list-style-type: none"> • NAS 上的硬盘正在格式化。 • NAS 正在初始化。 • 操作系统正在更新。 • RAID 正在重建。 • 正在进行在线 RAID 容量扩展。 • 正在进行在线 RAID 级别迁移。
	绿色	NAS 已准备就绪。
	闪烁绿色，每秒 2 次	<ul style="list-style-type: none"> • NAS 未配置。 • NAS 上的硬盘未格式化。
	红色	<ul style="list-style-type: none"> • 硬盘无效。 • 磁盘卷的容量已满。 • 磁盘卷的容量即将被占满。 • 系统风扇故障。 • 访问（读/写）数据时出错。 • 在硬盘上检测到坏扇区。 • NAS 处于降级只读模式（RAID 5 或 RAID 6 中的两个成员硬盘出现故障，但仍可读取数据）。 • 硬件自检错误。
	闪烁红色，每秒 2 次	NAS 处于降级模式（RAID 1、RAID 5 或 RAID 6 中的一个成员硬盘出现故障）。
	闪烁红色一次	NAS 收到遥控器的命令。
	闪烁琥珀色	NAS 处于睡眠模式 (S3)。
	熄灭	所有硬盘都处于待机模式。
千兆位 LAN（正面）	琥珀色	NAS 已连接至网络。
	闪烁琥珀色	正在从网络访问 NAS。
	熄灭	NAS 未连接至网络。
千兆位 LAN（背面）	左侧绿色	以太网端口已连接至 1 千兆位网络。
	左侧琥珀色	以太网端口已连接至 100 兆位网络。
	左侧熄灭	NAS 未连接至网络。
	右侧绿色	以太网端口已连接至网络。
	右侧闪烁绿色	正在从此以太网端口访问 NAS。
	右侧熄灭	以太网端口未连接至网络。
10 千兆位 LAN（正面）	绿色	NAS 已连接至 10 千兆位网络。
	闪烁绿色	正在从 10 千兆位网络访问 NAS。
	熄灭	NAS 未连接至 10 千兆位网络。

LED	状态	描述
10 GB LAN (背面)	左侧绿色	以太网端口已连接至 10 千兆位网络。
	左侧熄灭	以太网端口未连接至 10 千兆位网络。
	右侧琥珀色	以太网端口已连接至网络。
	右侧闪烁琥珀色	正在从此以太网端口传输数据。
	右侧熄灭	以太网端口未连接至网络。
硬盘	绿色	硬盘就绪。
	闪烁绿色	正在访问硬盘。
	红色	硬盘出错。
	闪烁红色, 每秒 5 次	操作系统正在定位硬盘。
	熄灭	未检测到硬盘。

警告音

时长	频率	描述
短提示音 (0.5 秒)	1	<ul style="list-style-type: none"> NAS 正在启动。 NAS 正在关闭 (软件关闭)。 用户已按下“重置”按钮。 操作系统已更新。
	3	用户尝试从前面的 USB 端口将 NAS 数据复制到外部存储设备, 但无法复制数据。
长提示音 (1.5 秒)	3 (每 5 分钟)	系统风扇故障。
	2	<ul style="list-style-type: none"> 磁盘卷的容量即将被占满。 磁盘卷的容量已满。 硬盘处于降级模式。 用户已启动硬盘重建过程。 插入或抽出硬盘。
	1	<ul style="list-style-type: none"> NAS 已通过强制关闭关机 (硬件关闭)。 NAS 已成功开机并准备就绪。

5. 故障排除

本章介绍基本故障排除信息。

强制 Qfinder Pro 或 myQNAPcloud 定位 NAS

如果在 QTS 安装过程中 Qfinder Pro 或 myQNAPcloud 无法定位 NAS，则硬盘或数据可能有故障。

1. 关闭 NAS 电源。
2. 取下所有硬盘。
3. 启动 NAS 电源。
4. 使用 Qfinder Pro 或 myQNAPcloud 定位 NAS。
5. 重新插入硬盘。
6. 继续安装 QTS。

热插拔故障硬盘

在以下情况下，NAS 支持热插拔硬盘：

- RAID 1：一个成员硬盘有故障
- RAID 5：一个成员硬盘有故障
- RAID 6：一个或两个成员硬盘有故障

1. 登录 QTS。
2. 转到主菜单 > 存储空间总管 > 存储 > 磁盘/VJBOD。
3. 找到发生故障的硬盘。
4. 准备一个与故障硬盘具有相同或更大容量的新硬盘。
5. 从 NAS 中取下故障硬盘。
6. 等待 20 秒或 NAS 发出两声提示音。
7. 从硬盘托盘中取下故障硬盘。
8. 将硬盘插入硬盘托盘中。
9. 安装新硬盘。
此时 NAS 会发出两声提示音。
10. 转到主菜单 > 存储空间总管 > 存储空间。
11. 找到包含新硬盘的卷，然后确认状态为正在重建。

恢复被意外移除的正常硬盘

NAS 支持独有的 RAID 恢复技术，可以从意外断开或移除的硬盘中恢复发生故障的 RAID 磁盘卷。用户可以将处于非活动状态的 RAID 1、RAID 5 或 RAID 6 卷恢复到降级模式，或将处于非活动状态的 RAID 0 和 JBOD 配置恢复为正常配置。

磁盘卷	RAID 恢复支持	被移除硬盘的最大数量
单个	否	不适用
JBOD	是	1
RAID 0	是	1
RAID 1	是	1
RAID 5	是	2
RAID 6	是	3
RAID 10	否	不适用

支持和其他资源

QNAP 提供了以下资源：

资源	URL
文档	http://docs.qnap.com
服务台	http://helpdesk.qnap.com
下载	http://download.qnap.com
社区论坛	http://forum.qnap.com

6. 术语表

CloudKey

分配给每个 NAS 设备的唯一 8 位数代码

CloudLink

可用于通过 Internet 访问 NAS，而且不必配置复杂的端口转发设置

myQNAPcloud

提供各种远程访问服务，如 DDNS 和 CloudLink

myQNAPcloud ID

用于注册 myQNAPcloud 帐户的电子邮件地址

Qfinder Pro

使您能够定位和访问局域网中的 QNAP NAS 设备

QTS

QNAP NAS 操作系统

7. 声明

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Version 3, 29 June 2007

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

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2. Source Code.

The “source code” for a work means the preferred form of the work for making modifications to it.

“Object code” means any non-source form of a work.

A “Standard Interface” means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

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FCC A 类声明



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SJ/T 11364-2006



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显示	0	0	0	0	0	0
印刷电路板	0	0	0	0	0	0

部件名称	有毒有害物质或元素					
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