



QNAP

TBS-453DX

用户指南

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1. 前言





关于本指南

本指南提供有关 QNAP TBS-453DX 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 TBS-453DX NAS 的基本信息。

关于 TBS-453DX

TBS-453DX 是一款紧凑型 NAS，配有 Intel® Celeron® J4115 四核 1.8 GHz 处理器或 Intel® Celeron® J4105 四核 1.5 GHz 处理器，支持高达 8 GB 的 DDR4 内存。它配备了千兆位和 10 GB 以太网端口来增强连接性，通过 HDMI 连接提供多媒体支持。除了四个 M.2 SATA SSD 插槽外，TBS-453DX 还特有 USB 一键复制功能，可实现方便高效的数据传输。

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	TBS-453DX
订购信息	
订购部件号	<ul style="list-style-type: none"> • TBS-453DX-4G • TBS-453DX-8G
处理器	
CPU	Intel® Celeron® J4115 Intel® Celeron® J4105
频率	4 核/4 线程 1.8 GHz 基本/2.5 GHz 脉冲 4 核/4 线程 1.5 GHz 基本/2.5 GHz 脉冲
架构	x86 64 位
加密引擎	AES-NI
内存	
预安装内存	<ul style="list-style-type: none"> • 4 GB RAM: 2 x 2 GB SODIMM DDR4 • 8 GB RAM: 2 x 4 GB SODIMM DDR4
内存插槽	2 x SODIMM DDR4 <div style="margin-top: 10px;"> 重要 <ul style="list-style-type: none"> • 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。 </div>
最大内存	8 GB RAM: 2 x 4 GB
闪存	4 GB eMMC
存储	

组件	TBS-453DX
M.2 SSD 插槽	4 x SATA 6 Gbps
M.2 SSD 外形规格	2280
网络	
10 Gb 以太网端口	1 x 10 GbE RJ45 (支持 5 GbE、2.5 GbE 和 1 GbE)
千兆位以太网端口	1 x GbE RJ45
外部 I/O 端口和扩展插槽	
USB 端口	<ul style="list-style-type: none"> 正面: 2 x USB 3.0 A 型  注 左侧端口支持 USB 一键复制。 <ul style="list-style-type: none"> 背面: 4 x USB 2.0 A 型 右面板: 1 x USB 3.0 A 型
HDMI 端口	1 x HDMI 2.0 (60 Hz 时分辨率最高 3840 x 2160)
音频端口	<ul style="list-style-type: none"> 2 x 3.5 mm 动圈式麦克风插孔 1 x 3.5 mm 线路输出插孔 2 x 扬声器  注 扬声器和线路输出插孔不能同时使用。
接口	
按钮	<ul style="list-style-type: none"> 电源 重置 USB 一键复制 音量
红外传感器	1  注 TBS-453DX 支持 QNAP RM-IR004 遥控器, 该遥控器是可选配件, 需另购。
尺寸	
外形规格	紧凑
尺寸 (高 x 宽 x 深)	25 x 230 x 165 mm (0.98 x 9.06 x 6.50 英寸)
净重	0.8 kg (1.72 磅)
其他	
电源单元	65W, 10-20V DC, 50/60 Hz
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。

组件	TBS-453DX
噪声声级	15.8 db(A)  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：1 个紧凑型内部风扇  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)
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

**提示**

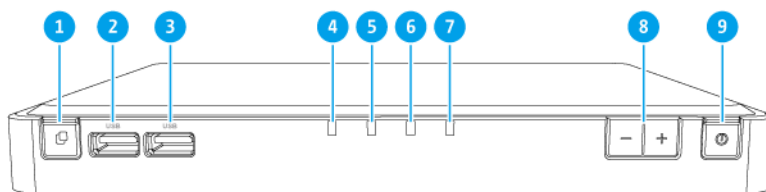
型号规格如有更改，恕不另行通知。要查看最新规格，请转到 <https://www.qnap.com>。

包装内容

项目	数量
TBS-453DX NAS	1
交流电源适配器	1
电源线	1
以太网线	2
M.2 SSD 螺丝	6
M.2 SSD 散热片	4
M.2 SSD 导热片	12
快速安装指南 (QIG)	1

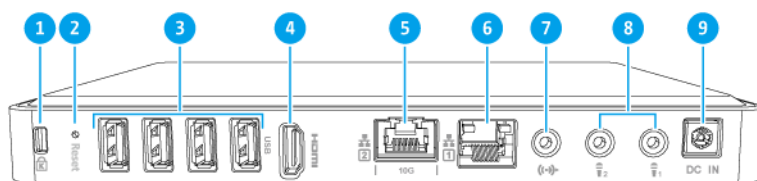
组件

前面板



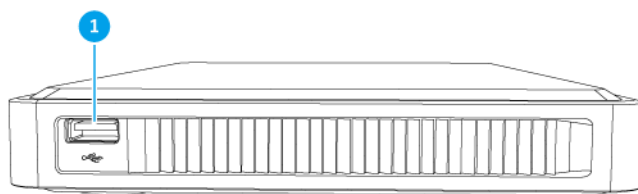
编号	组件	编号	组件
1	USB 一键复制按钮	6	硬盘 3 LED
2	USB 3.0 一键复制 A 型端口	7	硬盘 4 LED
3	USB 3.0 A 型端口	8	音量按钮
4	硬盘 1 LED	9	电源按钮
5	硬盘 2 LED	-	-

后面板



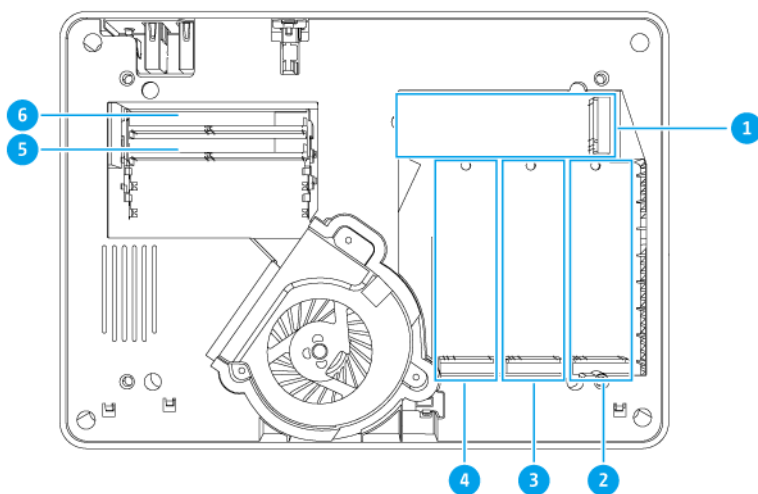
编号	组件	编号	组件
1	Kensington 安全锁孔	6	以太网端口 1 (GbE RJ45)
2	重置按钮	7	3.5 毫米线路输出插孔
3	USB 2.0 A 型端口	8	3.5 mm 动圈式麦克风插孔
4	HDMI2.0 端口	9	电源输入
5	以太网端口 2 (10 GbE RJ45)	-	-

右面板



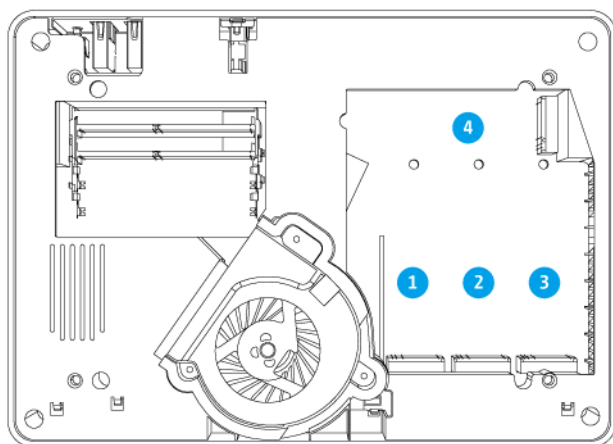
编号	组件	编号	组件
1	USB 3.0 A 型端口	-	-

系统主板



编号	组件	编号	组件
1	M.2 SSD 插槽 4	4	M.2 SSD 插槽 1
2	M.2 SSD 插槽 3	5	内存插槽 1
3	M.2 SSD 插槽 2	6	内存插槽 2

M.2 固态硬盘编号



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

- 设备应存放在通过器具、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设备，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
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

类别	项目
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. 安装硬盘。
有关详细信息，请参见[安装 M.2 固态硬盘](#)。
3. 连接电源线和所有适用的线缆。
4. 启动 NAS 电源。
5. 安装 QTS。
有关详细信息，请参见[QTS 安装](#)。
6. 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和更换内存模块的信息。

安装 M.2 固态硬盘



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。



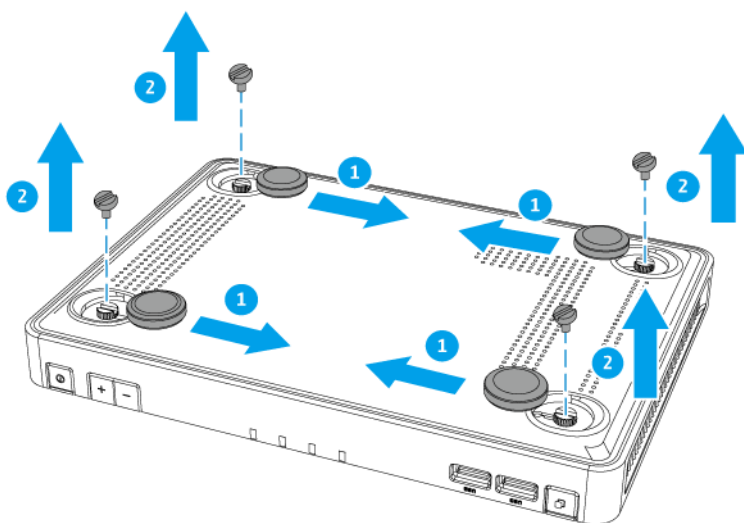
其他运动的组件：使您的双手和身体其他部位远离正在运动的其他组件。



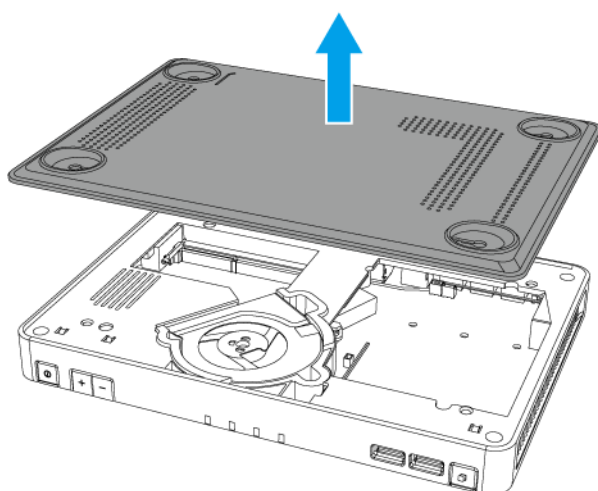
注

- TBS-453DX 有四个 M.2 SSD 插槽。有关兼容的 M.2 SSD 的列表，请转到 <https://www.qnap.com/compatibility>。
- QNAP 建议在 M.2 SSD 控制器上安装散热片和导热片，以提高散热效果并确保性能稳定。

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. 取下底盖。
 - a. 将 NAS 倒置。
 - b. 取下橡胶垫脚。
 - c. 取下螺丝。

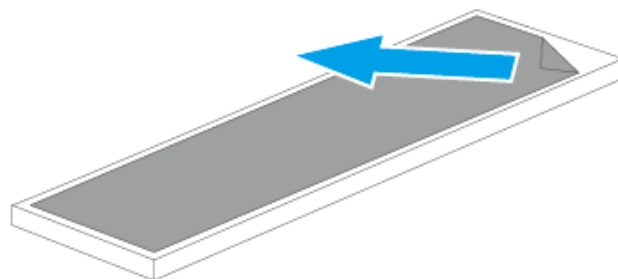


d. 从 NAS 上提起底盖。

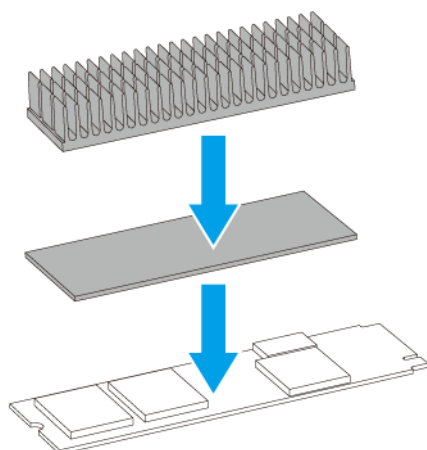


5. 在 M.2 SSD 控制器上安装散热片和导热片。

- a. 在 M.2 SSD 上找到控制器。
控制器位置因 M.2 SSD 的型号和制造商而异。
有关详细信息，请参阅文档或联系制造商。
- b. 取下导热片底部的保护膜。



- c. 将散热片和导热片安装到控制器上。

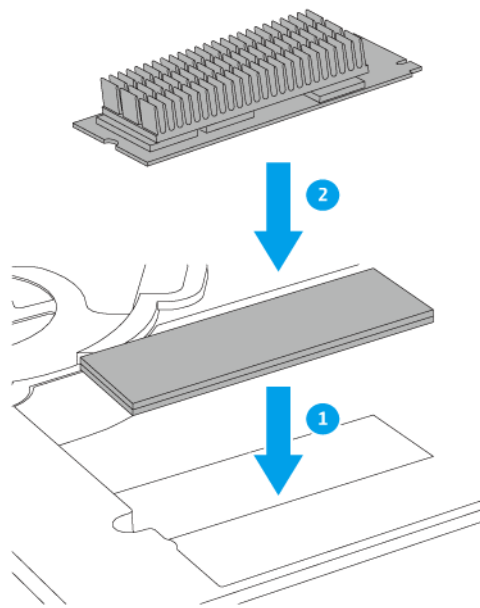


6. 将导热片安装到系统主板上。

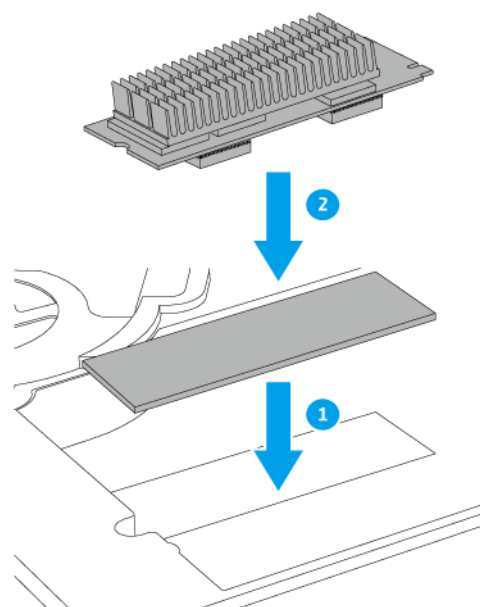


注

单面 M.2 SSD 的组件（如控制器、闪存集成电路）均只安装在上面一侧，双面 M.2 SSD 的组件则在两侧均有安装。在单面 M.2 SSD 上安装两片导热片，在双面 M.2 SSD 上安装一片导热片。



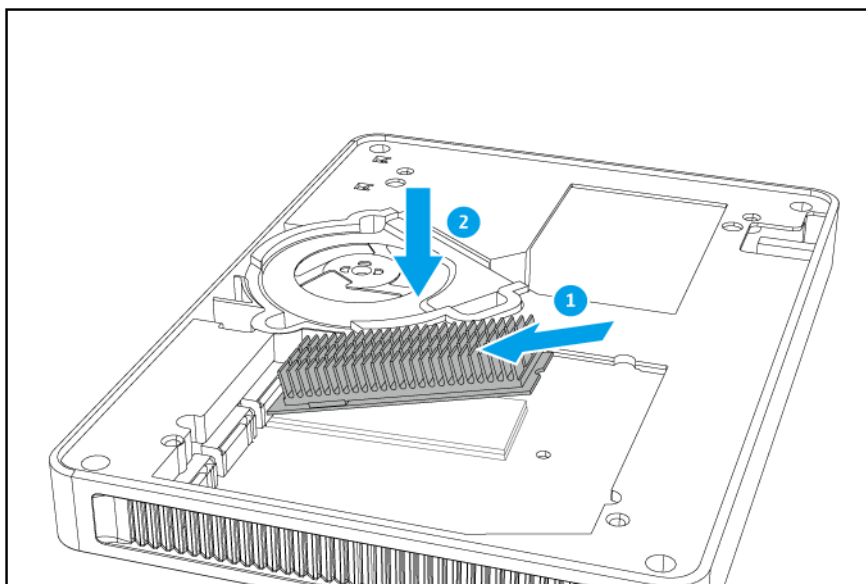
单面 M.2 SSD



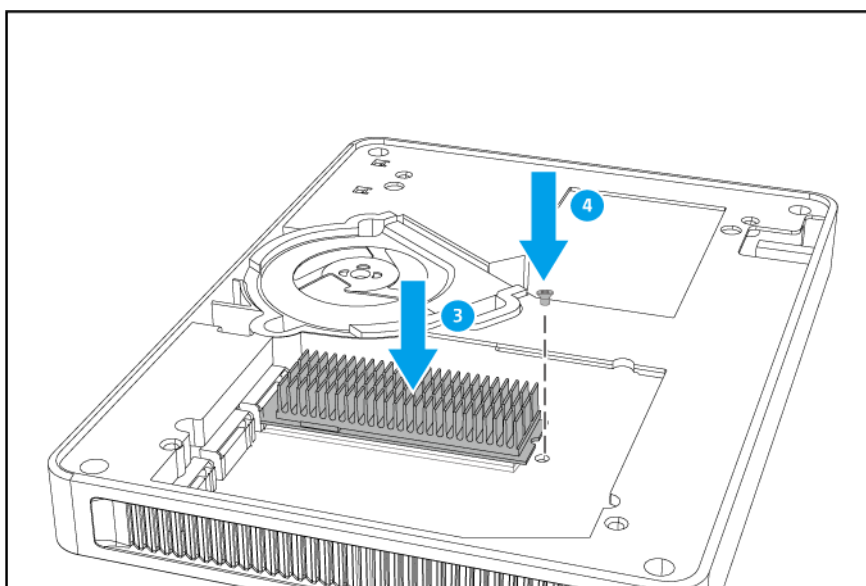
双面 M.2 SSD

7. 安装 M.2 SSD。

- a.** 将 M.2 SSD 插入插槽中。

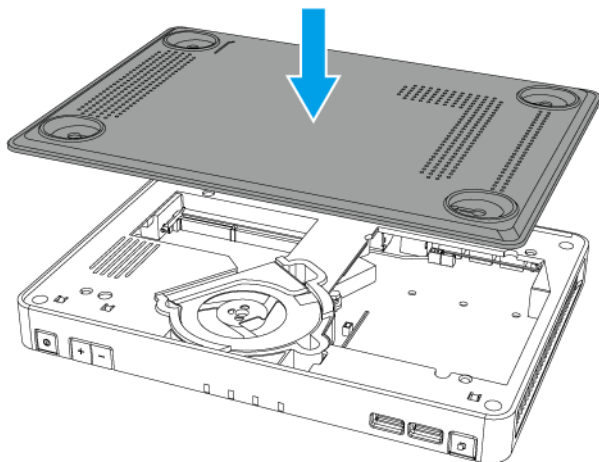


b. 将 M.2 SSD 牢固地安装到系统主板上的导热片上，然后装上螺丝。

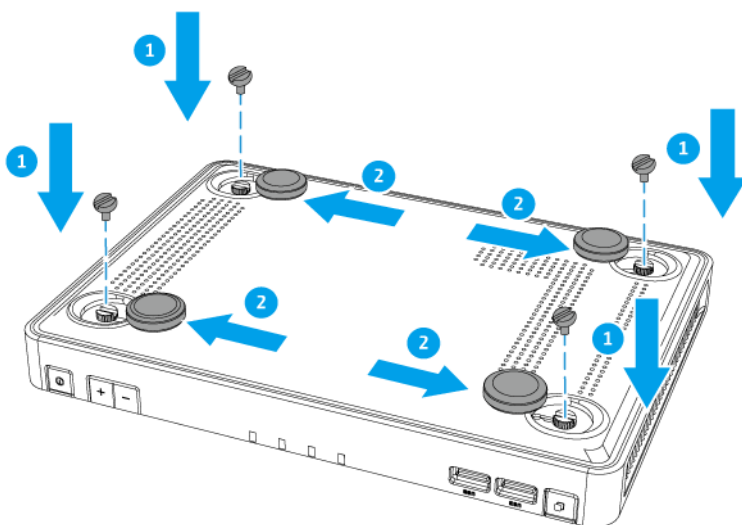


8. 安装底盖。

a. 将底盖放在 NAS 上。



- b. 安装螺丝。
- c. 安装橡胶垫脚。



- d. 将 NAS 正常直立放置。
9. 连接所有线缆和外接部件。
 10. 将电源线连接到插座。
 11. 启动 NAS 电源。

更换内存模块

TBS-453DX 有两个内存插槽。您可以通过升级内存模块来增加 NAS 的内存容量。使用两个模块时，只能使用类型 and 容量均相同的 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。

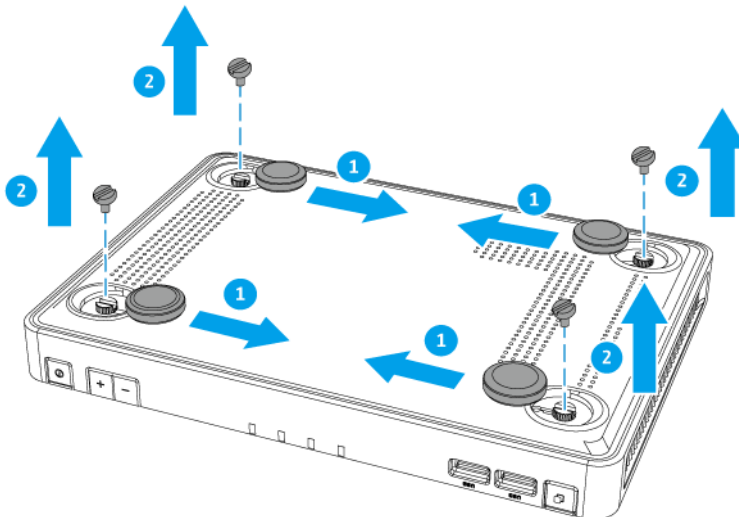


转动的风扇叶片：使您的双手和身体其他部位远离正在转动的风扇叶片。

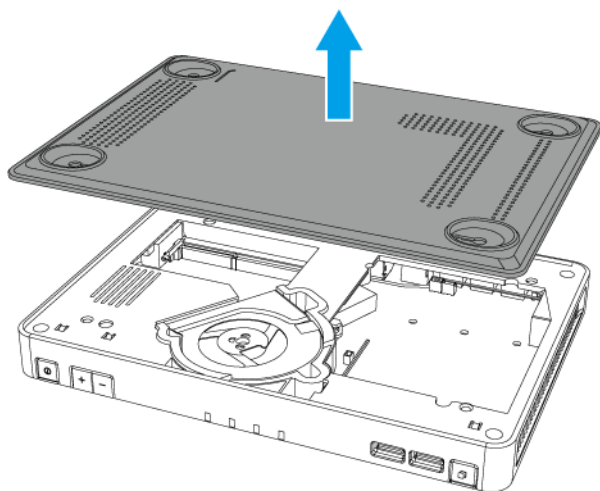


其他运动的组件：使您的双手和身体其他部位远离正在运动的其他组件。

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. 取下底盖。
 - a. 将 NAS 倒置。
 - b. 取下橡胶垫脚。
 - c. 取下螺丝。

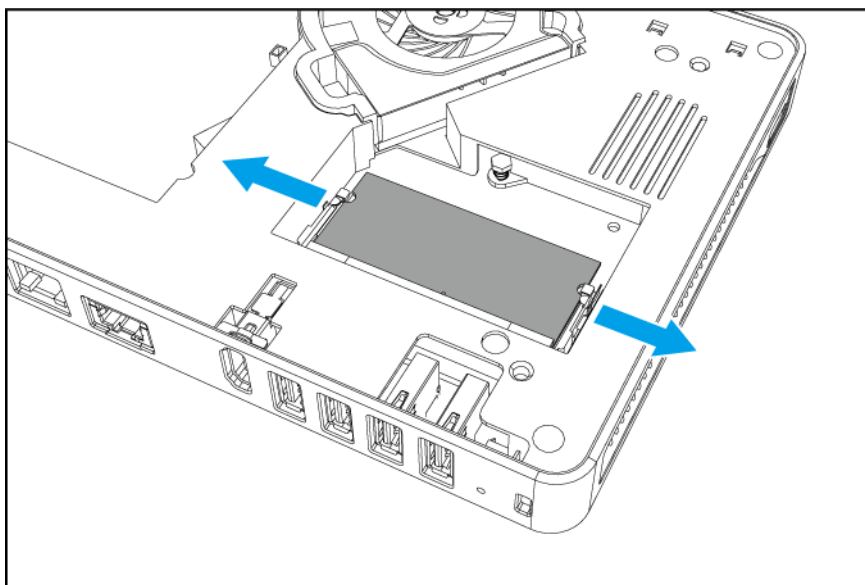


- d. 从 NAS 上提起底盖。



5. 取下现有模块。

- a. 同时向外推动固定夹以释放模块。



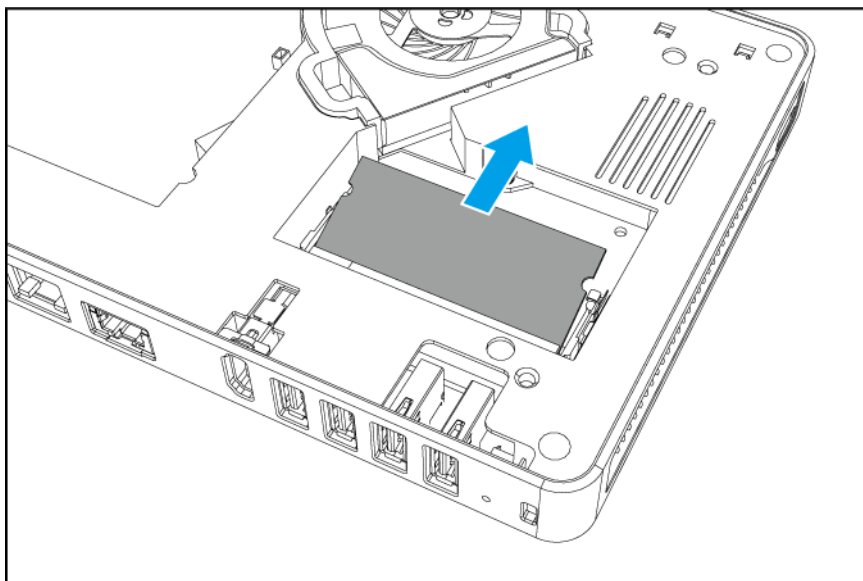
- b. 确认模块向上倾斜并已完全脱离插槽。



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拔出。

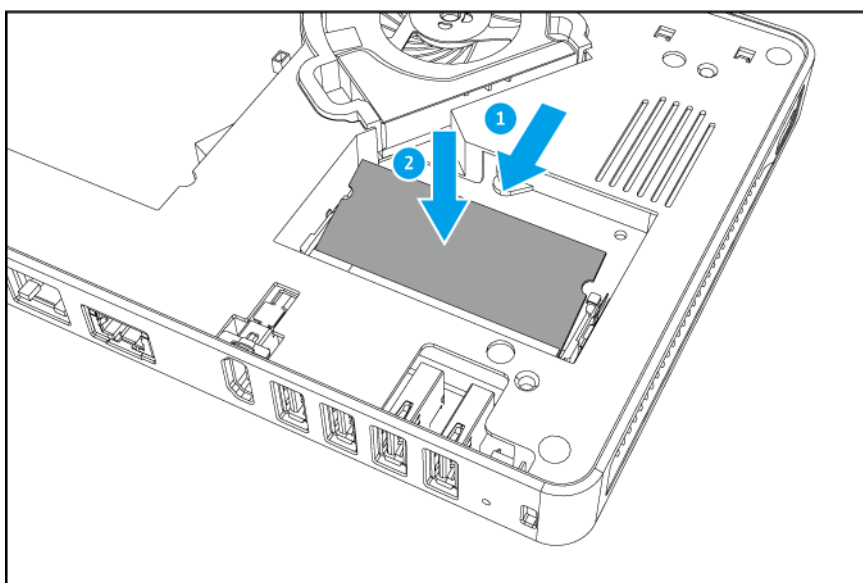


警告

- 请勿触摸内部组件，特别是金属接头。
- 不要折弯模块。

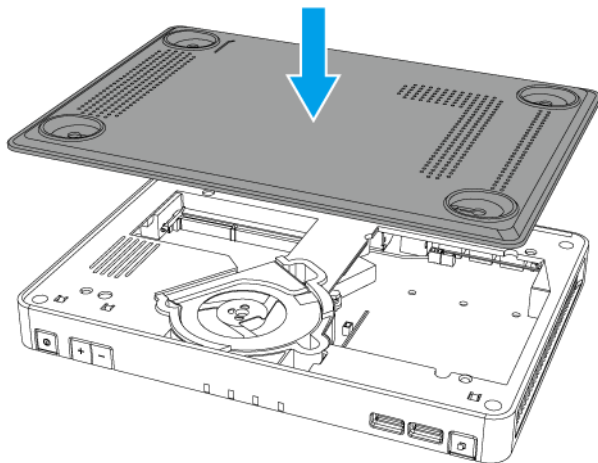
6. 安装新模块。

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



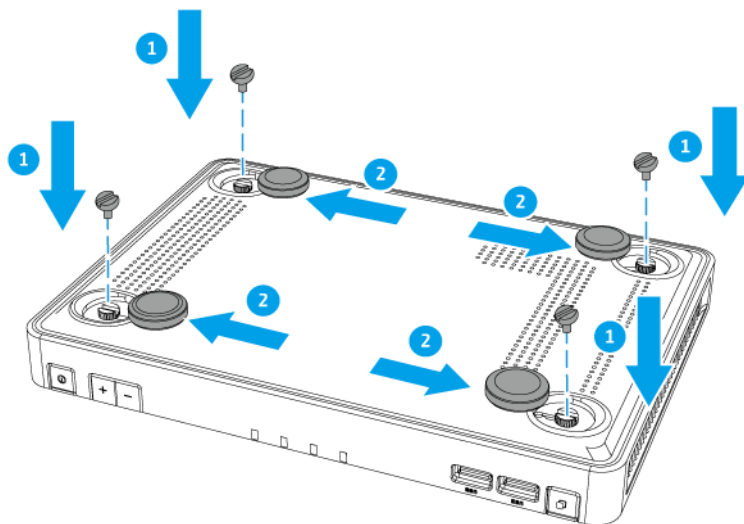
7. 安装底盖。

- a. 将底盖放在 NAS 上。



- b. 安装螺丝。

- c. 安装橡胶垫脚。



- d. 将 NAS 正常直立放置。

8. 连接所有线缆和外接部件。
9. 将电源线连接到插座。
10. 启动 NAS 电源。
11. 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。

QTS 安装

TBS-453DX 使用 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)	如果 NAS 已连接到您的局域网，可以执行以下操作： <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。 有关详细信息，请参见 使用 Qfinder Pro 安装 QTS 。	<ul style="list-style-type: none"> • 计算机 • 网线 • Qfinder Pro 安装程序
云安装	如果 NAS 已连接到 Internet，可以执行以下操作： <ul style="list-style-type: none"> • 扫描 NAS 上的二维码。 • 登录您的 myQNAPcloud 帐户。 • 使用 CloudLink 远程访问 NAS。 • 完成“智能安装指南”向导中的步骤。 有关详细信息，请参见 使用 Cloud Key 安装 QTS 。	<ul style="list-style-type: none"> • 计算机或移动设备 • 网线 • myQNAPcloud 帐户 • Cloud Key
本地安装	如果 NAS 支持 HDMI 输出，可以执行以下操作： <ul style="list-style-type: none"> • 将 NAS 连接到所需的硬件。 • 完成“智能安装指南”向导中的步骤。 有关详细信息，请参见 使用 HDMI 连接安装 QTS 。	<ul style="list-style-type: none"> • 监视器 • HDMI 线缆 • USB 键盘或遥控器（仅部分型号提供）

使用 Qfinder Pro 安装 QTS



警告

安装 QuTS 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。

智能安装指南将在默认 Web 浏览器中打开。

5. 单击启动智能安装指南。
6. 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。
7. 单击下一步。
8. 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。

9. 单击下一步。
10. 选择自动获取 IP 地址(DHCP)。
11. 单击下一步。
12. 选择将用于访问 NAS 上共享文件夹的设备类型。
13. 单击下一步。
14. 检查设置。
15. 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 QuTS。

16. 单击**确认**。
QTS 即安装完毕。

使用 Cloud Key 安装 QTS



警告

安装 QuTS 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。
智能安装指南将在默认 Web 浏览器中打开。

8. 单击启动智能安装指南。

9. 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。

10. 单击下一步。

11. 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。

12. 单击下一步。

13. 选择自动获取 IP 地址(DHCP)。

14. 单击下一步。

15. 选择将用于访问 NAS 上共享文件夹的设备类型。

16. 单击下一步。

17. 检查设置。

18. 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 QuTS。

19. 单击确认。
QTS 即安装完毕。

使用 HDMI 连接安装 QTS



警告

安装 QuTS 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. 将 HDMI 显示器连接到 NAS。
2. 将 USB 键盘连接到 NAS 或准备好 QNAP 红外遥控器（仅部分型号提供）。
3. 启动 NAS 电源。
此时会出现“智能安装指南”的**欢迎**屏幕。
4. 选择**启动智能安装指南**。
5. 选择**否，跳过此过程**。
启用多媒体功能后，可以在“存储与快照总管”中配置磁盘后安装多媒体应用程序。
有关在 QTS 上启用多媒体功能的详细信息，请参见《QTS 用户指南》的“系统管理”一节。
6. 选择**稍后配置**。
有关配置磁盘的详细信息，请参见《QTS 用户指南》的“存储与快照总管”一节。
7. 检查设置。
8. 单击**下一步**。
9. 检查设置。
10. 单击**下一步**。
此时会出现**确认**屏幕。



警告

单击**下一步**后，将先删除硬盘上的所有数据，然后再安装 QuTS。


11. 单击**下一步**。
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。	以下设置将重置为默认值： <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。	恢复默认出厂设置。 <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。

USB 一键复制按钮

使用 USB 一键复制按钮，可以将数据备份从 USB 设备复制到 NAS，或将数据备份从 NAS 复制到 USB 设备。

此功能支持增量备份。NAS 只会复制在上次备份后修改或添加的文件。

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
系统状态	红绿交替闪烁，间隔 0.5 秒	<ul style="list-style-type: none"> • 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。
	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，间隔 0.5 秒	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）。
	闪烁绿色，间隔 0.5 秒	<ul style="list-style-type: none"> • NAS 正在启动。 • NAS 未配置。 • 硬盘未格式化。
	绿色	NAS 已准备就绪。
	熄灭	所有硬盘都处于待机模式。
LAN	橙色	另一台设备访问数据期间发生了读/写错误。
	闪烁橙色	正在从网络访问 NAS。
硬盘	闪烁红色	正在访问数据，但在此过程中发生读/写错误。
	红色	发生硬盘读/写错误。
	闪烁绿色	正在访问数据。
	绿色	硬盘可供访问。

LED	状态	描述
USB	闪烁蓝色，间隔 0.5 秒	<ul style="list-style-type: none"> 检测到 USB 设备（已连接到前 USB 端口）。 正在从 NAS 移除 USB 设备（已连接到前 USB 端口）。 正在访问 USB 设备（已连接到 NAS 的前 USB 端口）。 正在与 USB 或 eSATA 设备间复制数据。
	蓝色	在前 USB 端口中检测到 USB 设备。
	熄灭	<ul style="list-style-type: none"> 未检测到 USB 设备。 NAS 已经完成与连接到前 USB 端口的 USB 设备间的数据复制。

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。

更换故障硬盘

在以下情况下，TBS-453DX 支持更换硬盘：

- 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



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。

1. 登录 QTS。
2. 转到主菜单 > 存储与快照总管 > 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. 关闭 NAS 电源。
6. 从硬盘插槽中取下故障硬盘。
7. 将新硬盘插入硬盘插槽中。
8. 启动 NAS 电源。
9. 登录 QTS。
10. 转到主菜单 > 存储与快照总管 > 存储 > 存储/快照
11. 找到包含新硬盘的卷，然后确认状态为正在重建。

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.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

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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.

The “System Libraries” of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A

“Major Component”, in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

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- e. Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

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FCC 声明

FCC B 类声明



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重要

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SJ/T 11364-2006



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部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (CR(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
壳体	0	0	0	0	0	0
显示	0	0	0	0	0	0
印刷电路板	0	0	0	0	0	0
金属螺帽	0	0	0	0	0	0
电缆组装	0	0	0	0	0	0
风扇组装	0	0	0	0	0	0
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电池	0	0	0	0	0	0
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