

Snow Leopard Miner

B1+ User's Guide



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1. Product Overview

The miner B1+ is Bitfily's new version in the Snow Leopard Miner series. It boasts an advanced ASIC chip using 10nm technology and complies with restrict and reliable design and manufacturing standards, completely surpassing the mainstream miners in the current market.

1.1 Miner B1+'s components

The miner B1+'s main components and controller front panel are shown in the following figures:





7 Functional Description

- ETH port is used to connect the Ethernet cable.
- The red and green lights indicate the operation status of the miner. When the green light twinkles, it indicates OK; when the red light keeps on, it indicates fault.
- Press and hold IP Report button from 2 seconds to 8 seconds to get the IP address of the miner. from 8 seconds to 15 seconds to change the IP mode, from dynamic address to static state address, or the opposite.
- Press and hold Reset button more than 3 seconds to restore the default settings of the miner.

Warning

- 1. Do not touch the rotating fan blades in case of personal injury.
- 2. Standard B1+ power supply is recommended to avoid damage to B1+ Miner or any safety accident.
- 3. The maximum power consumption of B1+ Miner is about 2250W. Please confirm whether your power socket meets the power requirements of the mining machine.
- 4. Do not spill water or other liquids onto B1+ Miner, especially the non-shell parts.

ASIC chip	BFL1001-32core	Hash rate	24.5T±5%
quantity of chips	288PCS	Hash rate of a chip	86.7GH/s
Energy	0.09J/GH	Power consumption	7.5W/0.405V
efficiency of chip		of chip	
Wall -power	2100W+10%	Rated voltage	14.5~15.5V (Hash Board)
consumption			12V (Controller Board)
Operating	0°C~40°C	Operating ambient	5%RH~95%RH, non-condensation
ambient temp.	(32°F~104°F)	humidity	
Network linking	10/100/1000MBase-T	Dimensions	(L)390mm*(W)149.5mm*(H)185mm
Noise	75dB	Net weight	8.5Kg

1.2 Specifications



2. Starting Your Miner

2.1 Preparatory Work

Prepare a network cable, a Miner B1+, a power supply unit, an AC power cord and a computer.

2.2 Connecting the Power Supply

Ten PCI-e connectors are located at the top of the Miner B1+ for connecting the PSU. Nine PCI-e connectors are for the hash boards and each hash board has a set of three PCI-e connectors. One PCI-e connector located on the controller is for the controller. (See figure 1 in part 1.1)

To connect the power supply:

- Connect PSU power cable connectors to each of the eight PCI-e connectors on the top of the miner and the PCI-e connector on the controller.
- 2) Connect the network cable to the ETH port.
- Check whether the flexible extension cables and the fan connection cable and regulated power supply socket on the top of the miner are connected properly.
- After all cables have been connected correctly, connect the AC power cord to the power outlet.

After connecting the power supply, please check whether the miner operates as follows:

- 1) the front and rear fans operate normally;
- 2) the green light on the controller twinkles;
- 3) the green light on the ETH port keeps on and the orange one twinkles;
- 4) the blue lights on the three sets of hash board PCI-e connectors keep on.

If the miner runs normally, you can move to the next step. If not, please troubleshoot the miner.



3. Setting Up Your Miner

- 1) Go to this site: https://pan.baidu.com/s/1c2HEx6w.
- 2) Download the file: IP-Reporter.rar
- 3) Extract the file.
- Install JAVA run time environment (if it is installed, skip this step): run JavaSetu p8u151.exe
- 5) Run the file: IP-Reporter.exe
- Press the IP Set button for more than two seconds and then the IP address will be displayed in the IP-Reporter interface.





7) In your web browser, enter the IP address provided and proceed to login using the

username "admin" and password "123456".

Bitfily Miner Console ×		θ - ¤ ×
← → C ☆ ③ 不安全 172.16.10.112		er 🕁 🚭 🛬 🛄 🗄
Miner Console بالتاس		
	SIGN IN	
	Username	
	admin Password	
	SIGN IN	
	© 2018 Bitfily Technology All Rights Reserved.	

8) In the Network Setting of Settings section, you can assign a Static IP address

(optional).

Bitfily Miner Console	× 🗆		θ	-	0	-	×
< → C Q 01	72.16.10.112/network-settings		\$	•	1	-	1
שוייר⊂ורה M	liner Console	07/09/2018 09:38:21	Language	1	admir	n .	l
👁 Status	Network Setting						
🏚 Dashboard							
 Settings 	Network Setting						
 Pool Setting 	Туре						
 Network Setting 	DHCP						
Logs	IP Address						
 Monitor 	172.16.10.112						
 Kernel 	Mask						
 Password 	255.255.255.0						
Miner Control	Gateway						
	172.16.10.1						
	DNS						
	114.114.114.114						
	Apply						

9) Setting up the pool. Click the Pool Setting in Settings section to set the options. Take

the Dpool as an example:

- Pool URL: btc-hn.s.dpool.top
- Port: 443 / 25 / 1800
- Worker: set up according to the sub-account you create on the pool
- Password: arbitrary password

After finishing the three settings, click Apply button.



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שיישרוני Mi	iner Console		07/09/2018 10:05:37	Language	🧕 admin -
Status	Pool 1				
& Dashboard	URL	stratum+tcp://btc-ab.s.dpool.top:443			
 Settings 	111-1-1-1	LINES BREAST AND			
 Pool Setting 	worker	Dittily_BitTily_BitC_AB			
 Network Setting 	Password	123456			
Logs					
 Monitor 	Pool 2				
 Kernel Liograde 	URL	stratum+tcp://btc-ab.s.dpool.top:25			
 Password 	Worker	bitfily.Bitfily_BTC_AB			
 Miner Control 	Password	123456			
	Pool 3				
	URL	stratum+tcp://btc-ab.s.dpool.top:1800			
	Worker	bitfily,Bitfily_BTC_AB			
	Password	123456			
	Apply				

0	Statement
•	The Miner B1+ only supports the mining of pools using ASIC BOOST technology.
	The Dpool is recommended.
•	The pool URL should use the node address where the miner is placed.

10) In the **Work Mode** of Settings section, you can set up the work mode of the

miner between Efficiency and Performance.

שירובי M	liner Console			09/19/2018 10:58:47	Language	👤 admin -
Status	Work Mode					
B Dashboard						
 Settings 	There are 3 tuning mode	s:				
 Pool Setting Network Setting Work Mode 	Efficiency: the mil Performance: hig Tuning takes about 10 m Please note hashrate wil	her will use less power but the l h hash rate and high power cor inutes and the result will be sa	assn rate will be lower isumption ved and used for again at reb	oot.		
Logs	0	, , , , , , , , , , , , , , , , , , , ,			×	
 Kernel Upgrade Password 	Efficiency				Performance	
Miner Control	Tunning Status					
	Current Mode:	Performance				
	Tunning Status:	Tuning				



After finishing the three settings, click Config button.

4. Monitoring Your Miner

- 1) Click Miner Status.
- 2) Monitor your miner through the followings:
 - Real-time hash rate: it shows the real-time hash rate of the miner in one minute.
 Average hash rate: it shows the average value of hash rate produced by the operating miner.
 - Working hour: it shows the uptime of the miner.
 - Fan: it respectively shows the rotating speeds of the front and rear fans as well as the duty cycle.
 - Curve graph: it shows the hash rate fluctuation of corresponding hash board from the moment it starts to work to the moment you check it.

Dashboard Settings Cool Setting Ietwork Setting Vork Mode IB Info Record LLVVotage Info Logs Cool Setting	RT Ha	sshrate sp:/bto-al sp:/bto-al sp:/bto-al Num chips	C a dpool 5 La dpool 5 La dpool 5	00 00	Av	ng Ha	Port 443	Worker		Work	Time			Reject Ratio 3		Fan 3	
Settings A bol Setting etwork Setting fork Mode B Info Record LLVoltage ther Setting Logs A anitor	Pool URU atrabarret strabarret atrabarret Chain #	L np:/bto-al np:/bto-al np:/bto-al Num chips	a dpool 5 (5 dpool 5 (a dpool 5	op 00			Port 443	Worker									
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twork Setting ork Mode al Info Record L/Voltage ng ogs ogs	stratum+1 stratum+1 Chain # 1	np://bto-al np://bto-al Num chips	is dpool t	0p 0p				befly Defi	V_BTC_AB			Alve	32760	44	633	832	1
nk Mode Info Record L/Voltage ng mer Setting ogs ^ nitor	straturer* Chain #	Num Num	a <mark>d</mark> pool à	op			25	bitRy Bits	N_BTC_AB			Asve	10384	1	0	0	0
Info Record .Voltage Ig er Setting bgs ^ nitor	Chain #	Num chips					1800	betty Bett	N_BTC_AB			Alve	16384	1	0	0	0
g g er Setting egs	Chain #	Num chips															
ng ver Setting ogs ^	1		Status	Hashrate (Th/s)	Accepted	Reje	eted Erro	dware Ten ors (Hit	nperature L/A °C)	PLL (MRz)	Voltage Avg(mV)	Chip S	tatas ()				
ogs ^		72	Alive	6.093	200	D	8	65.0	0/39.0/54.0	1320	406.0	000	00000010	0000000000	0000000	01000000	01000000
nitor	2	72	Aive	0.000	222	1	22	67.0	0/45.0/58.0	1320	404.0	000	00000010	000000000000000000000000000000000000000	0000000	10000000	01000000
	3	72	Aive	0.092	202	0	7	08.0	0/41.0/50.0	1320	405.0	000	00000010	000000000000000000000000000000000000000	0000000	10000000	01000000
nel	а.	72	Alive	6.039	208	0	11	69.0	0/45.0/57.0	1220	405.0	000	00000010	000000010	0000000	1000000	01000000
eer Control		Thu Sep	30 25 20 15 10 5 0 06 201	hashRate TH/s TH/s TH/s TH/s TH/s TH/s TH/s TH/s	GMT+0800	0 (中國	100.000	•	Thu	Sep 06	2018 15:3	Chain3	 Chain4 T+0800 (中間転行 	Total Becjill)	Thu Sep 06	2018 15:47:00 GM	T+0800 (中國時7艘

5. Administering Your Miner

1) Check your software version in **Dashboard** section.

In the example below, the miner is using software version: B1+_20180917_143358



שויירוני 🕅	机控制台				09/17/2018 15:55:24 语言 🚊 admin-
● 状态监控	矿机面板				
6 矿机西板					
へ 配置 へ	系统信息		内存(MB)		
 び他设置 网络设置 てたまず 	Miner Model 矿机类型	B1+			
 ▲ 日志管理 へ 	SN 序列号	B1+	89	111	37
 ・	OS 操作系统	Linux			
・回1+7182 ・密码管理 ・矿机控制	Hardware Version 硬件版本	b20	使用量 Bit	可用量	鑽存量
	Kernel Version 内核版本	Linux Bitfily 4.14.0-xilinx #1 SMP PREEMPT Mon Sep 17 14:30:14 CST 2018 armv7l GNU/Linux	Type 콧힢		dhcp
	Software Version 软件版本	b1+_20180917_143358	IP Address IP地址		172.16.10.111
	Release Date 版本发布时间	20180917	Physical Address 物理地址		00:BF:B1:11:43:E4
	Uptime 运行时间	1小时 15分钟			
	Load Average 平均负载	0.02 0.03 0.00 1/99 3343			

2) Upgrade your firmware

In Upgrade of Logs section, select a .swu formatted file and then click Upgrade button.

Status	Upgrade
Dashboard	
Settings	System Upgrade
Pool Setting Network Setting	Please select the firmware file in your local computer then upload it to the miner by clicking 'Upgrade Firmware' button Note:The firmware is a .swu formated file, other formats are not supported.
Logs	Upload Progress :
Monitor Kernel	Upgrade Progress :
Upgrade	Ungrade Status -
Password	000,000,000,000
Miner Control	Upload .swu format file: 选择文件 未选择任何文件 Upgrade Firmware @ 2018 Bitlily Technology.All Rights Reserved.
Miner Control	Upload .swu format file: 通择文件 未选择任何文件 Upgrade Firmware @ 2018 Birliy Technology.All Rights Reserved.
Miner Control	Upload .swu format file: 通接文件 未选择任何文件 Upgrade Firmware @ 2018 Betly Technology.All Rights Reserved. Statement
Miner Control	Upload .swu format file: 通路文件 未出释任何文件 Upgrade Firmware @ 2018 Betly Technology All Rights Reserved. Statement When the upgrade is complete, the miner system will reboot. Therefore, you need to
Miner Control	Upprade .swu format file: العاقد الجنوب العالي ال العالي العالي ا
Miner Control	upload .swu format file: سلامی الله الله الله الله الله الله الله الل

In Password of Logs section, input your current password and new password and then click



Apply button to modify your password.

שויקרוני N	iner Console			07/09/2018 10:03:40	Language	👤 admin v
Status	Password					
8 Dashboard						
 Settings 	Current Password:					
Pool Setting						
 Network Setting 	New Password:					
Logs						
Monitor	Confirm New Password :					
Kernel						
 Upgrade 	Update					
Password						
 Miner Control 		© 2018 Bitfily Technology All Rights	Reserved.			

4) Reboot your miner

In Miner Control of Logs section, click Reboot button and Confirm button, the miner will

Statuis St	שותרוני M	iner Console			07/09/2018 10:04:49	Language	👤 admin -
Bashbaard Setting Koose Carcel Carcel Confirm Noetwork Setting	 Status 	Minor Control	Confirm	×			
Setting Pool Setting Network Setting Network Setting Network Setting Nontor Monitor Mon	& Dashboard	Willier Control	Are you sure you want	to reboot this device?			
Pool Setting Network Setting Network Setting Notion Kornal O2018.Bitly Technology.All Rgtm Reserved. Passwork Mone Control	🔹 Settings 🔷 🔨	Reboot		Cancel Confirm			
Montor Montor O2018 Birly Technology MI Rights Reserved. O2018 Birly Technology MI Rights Reserved. Password Mont Control Mont Control	Pool Setting Network Setting Logs	When you click on "Reboot" but Reboot	ton below, the machine will start re	booting. You will need to wait se	veral minutes for the system gets b	nck.	
	* Monitor						
	Kernel Upgrade Password Miner Control		© 2018 Bitfly Techno	Angy-All Rights Reserved.			

reboot immediately.

Statement

In reboot process, the Miner Console is unavailable. After the reboot is complete, you can log in again.