

mToken CryptoID Mac OS Testing Report

- mToken CryptoID FIPS 140-2 Level 3
- mToken CryptoID FIPS 140-3 Level 3

Mac OS Versions

- 1) macOS Intel Core i9
- 2) macOS M1
- 3) macOS M2
- 4) macOS M3
- 5) macOS M4
- 6) macOS M5

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Hardware Devices:

- mToken CryptoID FIPS 140-2 Level 3
- mToken CryptoID FIPS 140-3 Level 3

Software Driver:

mToken_CryptoID_User.dmg

Download Link: <https://drive.google.com/file/d/1Nex6tjcWAdhBCK5d3wDATgBoR2YITC-u/view?usp=sharing>

MD5 value: b2aac02a30cd01ae327d67346e60287b

Library:

libcryptoida_pkcs11.dylib

Path: /usr/local/lib/libcryptoida_pkcs11.dylib

MD5 Value: f9ec67571ffa3f923b6681056e1b41d9

Testing Tool:

Mozilla Firefox

Testing Method:

Add new module and load pkcs11 library, both FIPS 140-2 and FIPS 140-3 hardware can login successfully.

MUST-TO-DO:

Install mToken_CryptoID_User.dmg, as it will release necessary libraries into **/usr/local/lib**. If don't install this driver, but directly use one library might lead error or not able to recognize token.

Testing Results in Table:

Hardware Devices	Mac OS version	Testing Result
- mToken CryptoID FIPS 140-2 Level 3 - mToken CryptoID FIPS 140-3 Level 3	Intel Core i9	PASS
	M1	PASS
	M2	PASS
	M3	PASS
	M4	PASS
	M5	PASS

Testing Results in Details

1. macOS Version (Intel Core i9)



Device Manager



Security Modules and Devi...	Details	Value	
✓ NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... ✓ cryptoid - Virtual Slot 0 - CryptolDA PKCS11 Modu... ✓ Builtin Roots Module - NSS Builtin Objects ✓ OS Client Cert Module - OS Client Cert Slot	- Module - Path	- cryptoid /usr/local/lib/libcryptoida_pkcs11.dylib	- Log In - Log Out - Change Password - Load - Unload - Enable FIPS

OK

Security Modules and Devi...	Details	Value	
- NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... - cryptoid Virtual Slot 0 - CryptolDA PKCS11 Modu... - Builtin Roots Module - NSS Builtin Objects - OS Client Cert Module - OS Client Cert Slot	Status	Logged In	Log In
	Description	Virtual Slot 0	Log Out
	Manufacturer	Longmai	Change Password
	HW Version	5.0	Load
	FW Version	3.12	Unload
	Label	mToken CryptoID	Enable FIPS
	Manufacturer	Longmai	
	Serial Number	CL26032600000001	
	HW Version	5.0	
	FW Version	3.12	

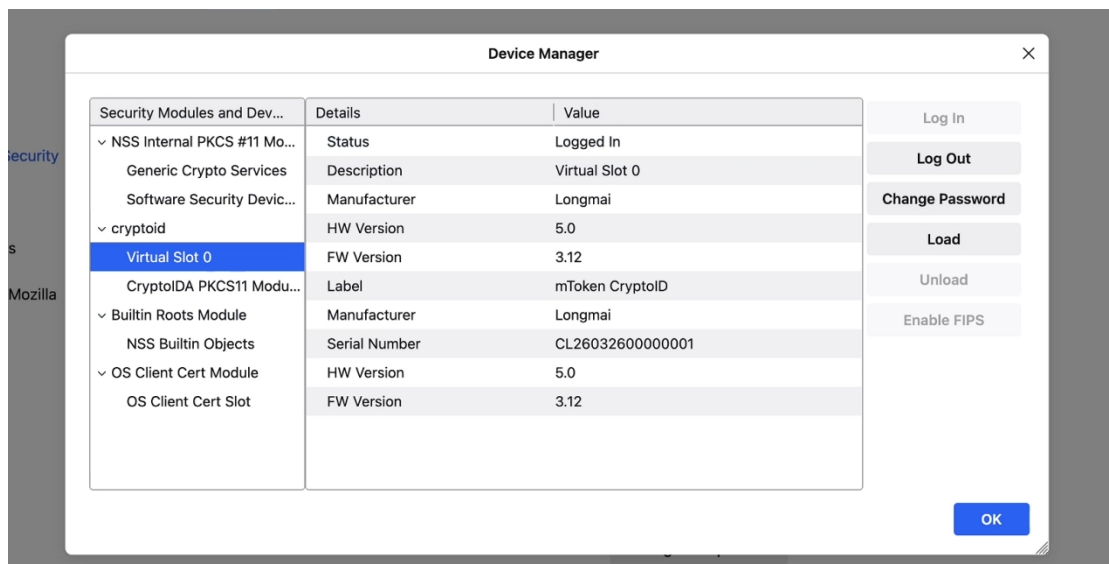
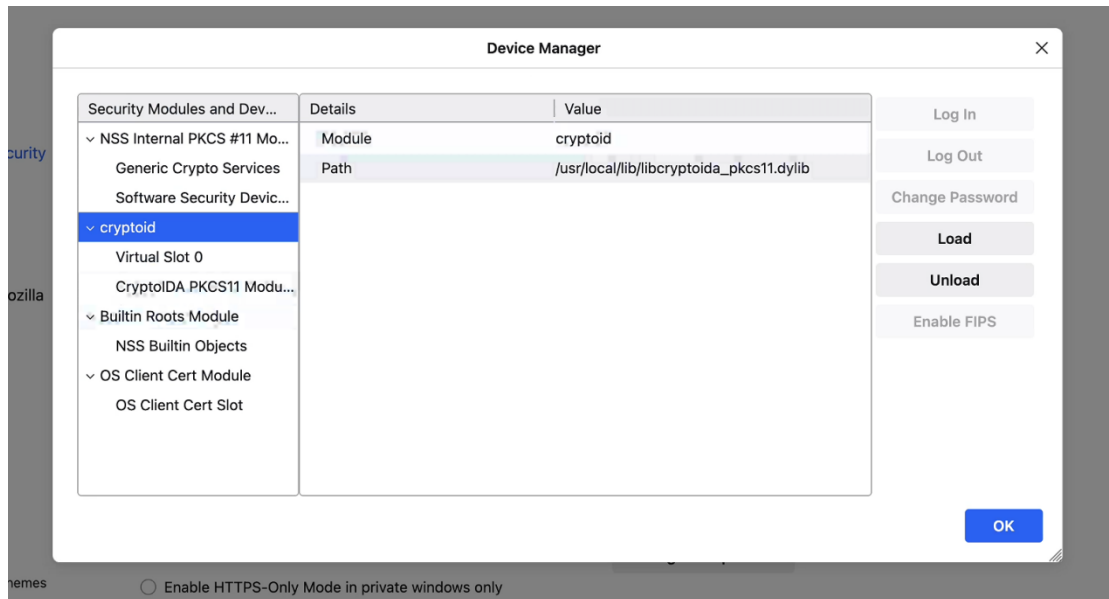
OK

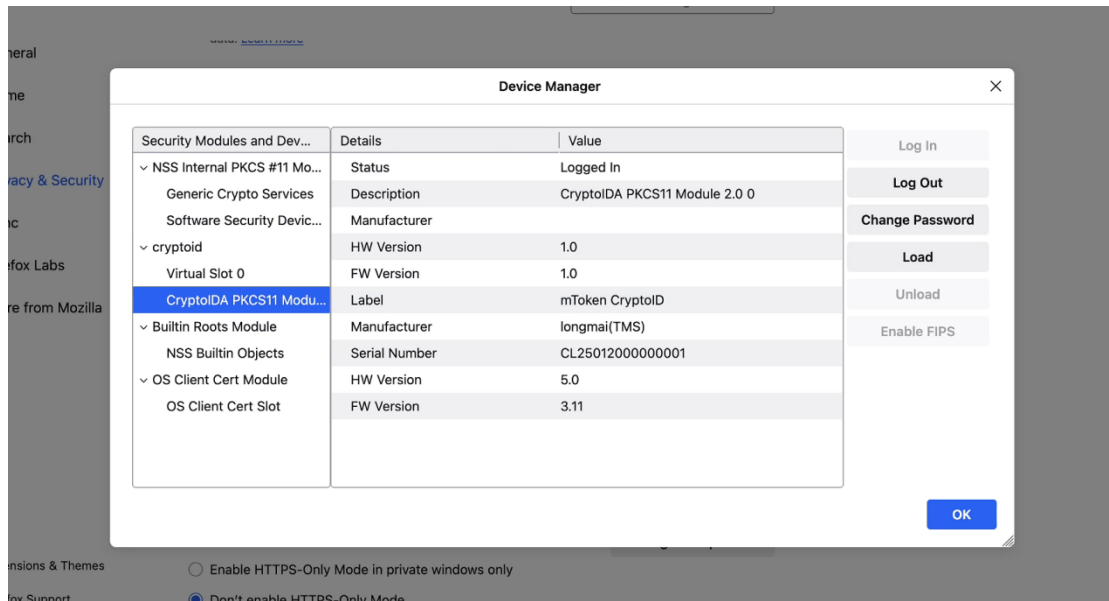
Security Modules and Devi...	Details	Value	
- NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... - cryptoid - Virtual Slot 0 CryptolDA PKCS11 Modu... - Builtin Roots Module - NSS Builtin Objects - OS Client Cert Module - OS Client Cert Slot	Status	Logged In	Log In
	Description	CryptolDA PKCS11 Module 2.0 0	Log Out
	Manufacturer		Change Password
	HW Version	1.0	Load
	FW Version	1.0	Unload
	Label	mToken CryptoID	Enable FIPS
	Manufacturer	longmai(TMS)	
	Serial Number	CL25012000000001	
	HW Version	5.0	
	FW Version	3.11	

OK

2. macOS Version (M1)

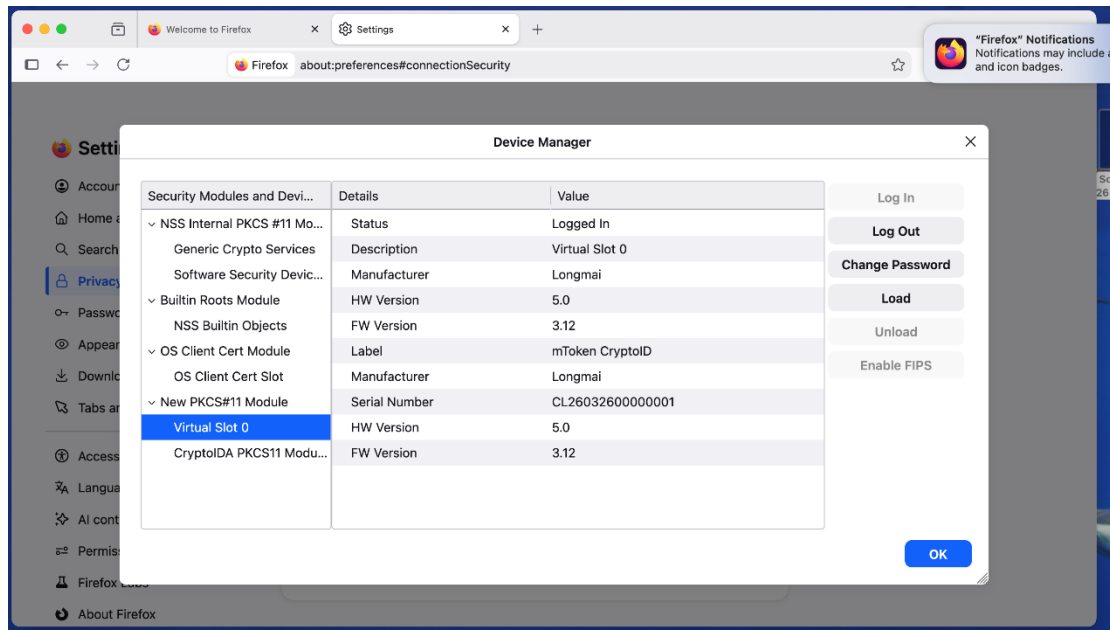
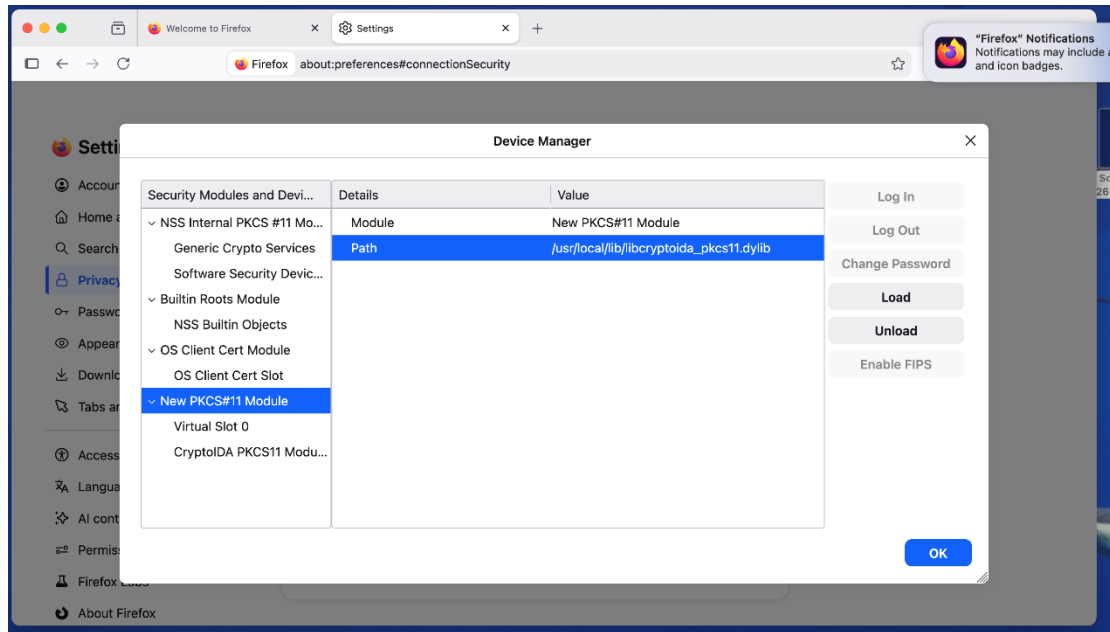


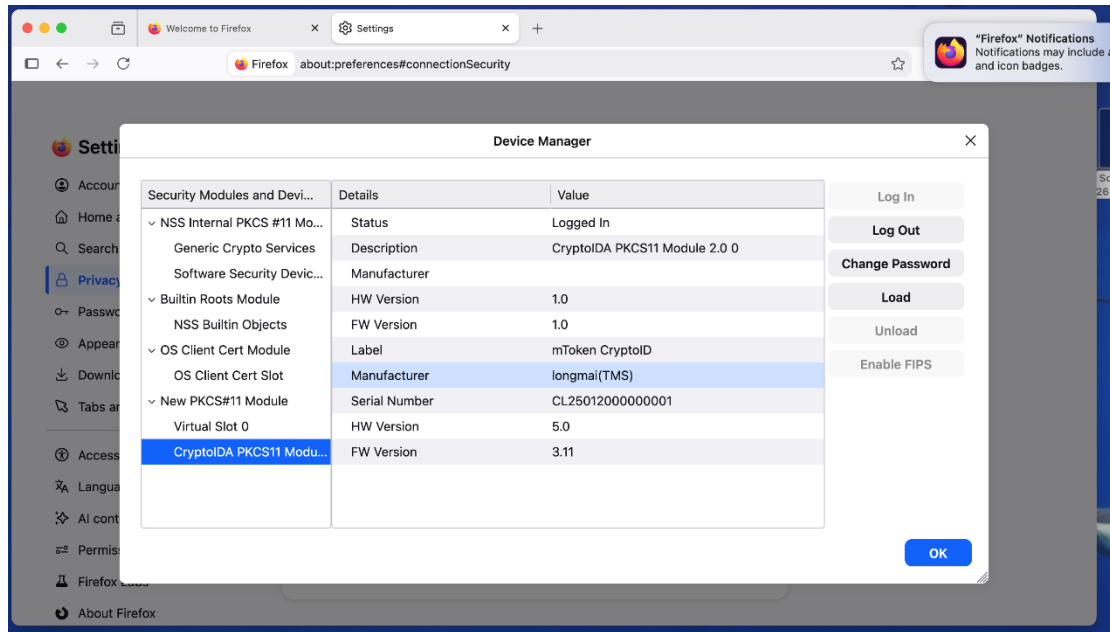




3. macOS Version (M2)







4. macOS Version (M3)



The screenshot shows the 'Device Manager' application window. On the left is a tree view under 'Security Modules and Devices'. The 'cryptoidANew PKCS#11 Module' is selected and highlighted in blue. The center pane displays a table with two columns: 'Details' and 'Value'. The table contains two rows: 'Module' with value 'cryptoidANew PKCS#11 Module' and 'Path' with value '/usr/local/lib/libcryptoida_pkcs11.dylib'. On the right side of the window are several buttons: 'Log In', 'Log Out', 'Change Password', 'Load', 'Unload', and 'Enable FIPS'. At the bottom right is a blue 'OK' button.

Details	Value
Module	cryptoidANew PKCS#11 Module
Path	/usr/local/lib/libcryptoida_pkcs11.dylib

Device Manager

Security Modules and Devices

▼ NSS Internal PKCS #11 Module

Generic Crypto Services

Software Security Device

▼ BuiltIn Roots Module

NSS BuiltIn Objects

▼ OS Client Cert Module

OS Client Cert Slot

▼ cryptoidANew PKCS#11 Module

Virtual Slot 0

CryptoIDA PKCS11 Module

Details	Value
Status	Logged In
Description	Virtual Slot 0
Manufacturer	Longmai
HW Version	5.0
FW Version	3.12
Label	mToken CryptoID
Manufacturer	Longmai
Serial Number	CL26032600000001
HW Version	5.0
FW Version	3.12

Log In

Log Out

Change Password

Load

Unload

Enable FIPS

Device Manager

Security Modules and Devi...	Details	Value
√ NSS Internal PKCS #11 Mo...	Status	Logged In
Generic Crypto Services	Description	CryptoIDA PKCS11 Module 2.0 0
Software Security Devic...	Manufacturer	
√ BuiltIn Roots Module	HW Version	1.0
NSS BuiltIn Objects	FW Version	1.0
√ OS Client Cert Module	Label	mToken CryptID
OS Client Cert Slot	Manufacturer	longmai(TMS)
√ cryptoidANew PKCS#11 M...	Serial Number	CL25012000000001
Virtual Slot 0	HW Version	5.0
CryptolDA PKCS11 Modu...	FW Version	3.11

Log In

Log Out

Change Password

Load

Unload

Enable FIPS

OK

5. macOS Version (M4)



Device Manager



Security Modules and Devi...	Details	Value	Log In
▼ NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... ▼ Builtin Roots Module - NSS Builtin Objects ▼ OS Client Cert Module - OS Client Cert Slot ▼ cryptoid - Virtual Slot 0 - CryptoIDA PKCS11 Modu...	- Module - Path	- cryptoid /usr/local/lib/libcryptoida_pkcs11.dylib	- Log Out - Change Password - Load - Unload - Enable FIPS

OK

Security Modules and Devi...	Details	Value
- NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... - Built-in Roots Module - NSS Built-in Objects - OS Client Cert Module - OS Client Cert Slot - cryptoid - Virtual Slot 0 - CryptoID PKCS11 Modu...	- Status - Description - Manufacturer - HW Version - FW Version - Label - Manufacturer - Serial Number - HW Version - FW Version	- Logged In - Virtual Slot 0 - Longmai 5.0 3.12 - mToken CryptoID - Longmai - CL26032600000001 5.0 3.12

Log In
Log Out
Change Password
Load
Unload
Enable FIPS

OK

Security Modules and Devi...	Details	Value
- NSS Internal PKCS #11 Mo... - Generic Crypto Services - Software Security Devic... - Built-in Roots Module - NSS Built-in Objects - OS Client Cert Module - OS Client Cert Slot - cryptoid - Virtual Slot 0 - CryptoID PKCS11 Modu...	- Status - Description - Manufacturer - HW Version - FW Version - Label - Manufacturer - Serial Number - HW Version - FW Version	- Logged In - CryptoID PKCS11 Module 2.0 0 - Longmai 1.0 1.0 - mToken CryptoID - longmai(TMS) - CL25012000000001 5.0 3.11

Log In
Log Out
Change Password
Load
Unload
Enable FIPS

OK

6. macOS Version (M5)



The screenshot shows the 'Device Manager' application window. On the left, a tree view lists security modules. The 'cryptoid' module is selected and highlighted in blue. The right pane displays the details for the 'cryptoid' module, showing its path as '/usr/local/lib/libcryptoida_pkcs11.dylib'. The 'Log In' button in the right pane is highlighted.

Security Modules and Devices	Details	Value
▼ NSS Internal PKCS #11 Module	Module	cryptoid
Generic Crypto Services	Path	/usr/local/lib/libcryptoida_pkcs11.dylib
Software Security Device		
▼ Builtin Roots Module		
NSS Builtin Objects		
▼ OS Client Cert Module		
OS Client Cert Slot		
▼ cryptoid		
Virtual Slot 0		
CryptoidA PKCS11 Module		

Device Manager

✕

Security Modules and Devi...	Details	Value	Log In
- Generic Crypto Services - Software Security Devic... - Builtin Roots Module - NSS Builtin Objects - OS Client Cert Module - OS Client Cert Slot - cryptoid - Virtual Slot 0 - CryptoIDA PKCS11 Modu...	- Status - Description - Manufacturer - HW Version - FW Version - Label - Manufacturer - Serial Number - HW Version - FW Version	- Logged In - Virtual Slot 0 - Longmai 5.0 3.12 - mToken CryptoID - Longmai - CL26012300008031 5.0 3.12	- Log Out - Change Password - Load - Unload - Enable FIPS

OK

Device Manager

✕

Security Modules and Devi...	Details	Value	Log In
- Generic Crypto Services - Software Security Devic... - Builtin Roots Module - NSS Builtin Objects - OS Client Cert Module - OS Client Cert Slot - cryptoid - Virtual Slot 0 - CryptoIDA PKCS11 Modu...	- Status - Description - Manufacturer - HW Version - FW Version - Label - Manufacturer - Serial Number - HW Version - FW Version	- Logged In - CryptoIDA PKCS11 Module 2.0 0 - Longmai 1.0 1.0 - mToken CryptoID - longmai(TMS) - CL21083100333584 5.0 3.11	- Log Out - Change Password - Load - Unload - Enable FIPS

OK