



# Open Source Hardware Security For Cloud Protection

<b>Risks</b>	70% of attacks succeed b/c of passwords, phishing. 2FA and passwordless login protects!	Compromised cryptographic keys can risk company assets. Hardware Security Modules (HSM) are like 2FA for the cloud
<b>Compliance</b> (e.g. GDPR, PCI)	Two-factor authentication (2FA) of users	Cloud/Infrastructure with HSM store cryptographic keys
<b>Solutions</b>	Nitrokeys 	NetHSM 
<b>Reasons</b>	<ul style="list-style-type: none"><li>• Proprietary security devices can't be trusted*</li><li>• Easy to hide flaws and backdoors in electronics and firmware</li><li>• Security systems have to be open source</li><li>• Sovereignty requires trusted hardware made in EU</li></ul>	

\* Verbatim, Lepin (2022), Yubico, Safenet, eyeDisk (2019), Samsung, Crucial (2018), Fujitsu, Zalman, Apricorn, Satechi, Startech (2016), Western Digital (2015), Xystec (2012), RSA (2011), Kingston, SanDisk, Verbatim, MXI, Corsair's Padlock (2010), Raidon's Staray-S-Serie (2009), 9Pay, A-Data, Transcend, Digittrade (2008), Excelstor (2005), Lexar (2004)