Implementation of a Bitcoin Mining System Using Single Board Computers (SBC): A Review

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Abstract. Cryptocurrency, often known as digital currency, is a distributed and public ledger system that makes use of encryption to strengthen the security of financial transactions. To run a profitable Bitcoin mining operation, you will need a sizable number of hash functions, which in turn demands a powerful mining rig. In this piece, we will demonstrate how to install a cryptocurrency miner on your computer using a Raspberry Pi computer, some USB hash miners, and CG-Miner software running on the operating system of your choice. The Raspberry pi achieves a high level of interoperability, and its exploration of new frontiers is aided by its portable nature. This is because it provides a platform that is based on a System on a Single Chip (SoC). The mining industry's exponential growth has resulted in increased demand for cryptocurrency mining, which has resulted in the creation of a new technology that is both cost-effective and energy-efficient, and it was created in response to this need.

Keywords: Cryptocurrency, Bitcoin, Raspberry Pi, CG Miner, Hashing