

Interesting article, although the terminology used is a bit confusing.

Your protocol is trying to provide a preconfirmation of the L2 block before it is eventually confirmed on the L1. The [original based preconfirmation protocol](#) is providing preconfirmations of L2 transactions before the L2 block is published and confirmed on the L1. This is an important distinction.

L2s typically provide block preconfirmations (in the context of L1 confirmation) to users to reduce the latency between L2 transaction submission and a guarantee of sequencing or execution. Block precons require some sort of consensus protocol or trusted entity. Your protocol is an implementation of a L2 block preconfirmation protocol.

On the other hand, transaction preconfirmations are agnostic to the consensus protocol, and provide latency guarantees at least as fast as the underlying consensus protocol, although these can be made arbitrarily fast. Based precons are an example of a transaction preconf mechanism. Any blockchain/rollup can offer transaction precons, including rollups offering block precons, as long as the L2 block proposer is known in advance.

In the context of your BFT-based block-preconfirmation protocol, the BFT leader could also offer transaction preconfirmations, although the transaction preconfirmation guarantees provided by an off-chain BFT proposer will likely be different to those of a based-rollup proposer.

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