

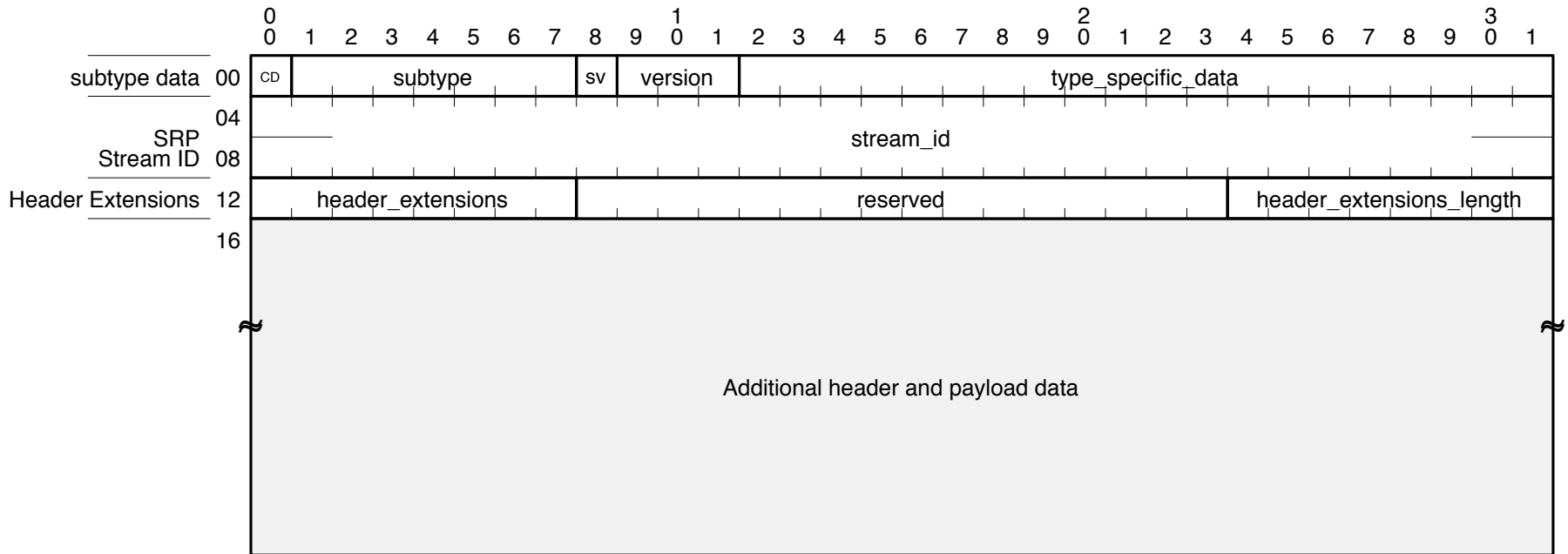
IEEE 1722a Version 1 headers 0.2

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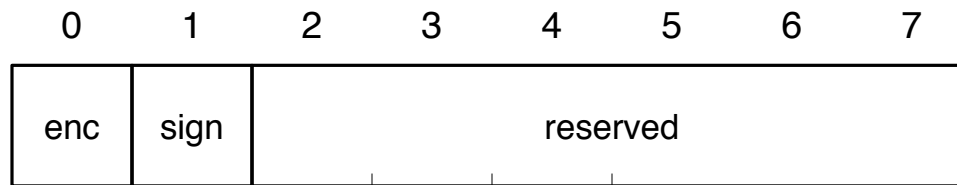
Version 1 Header

- Defines optional header extensions
 - Initially Signed Packet and Encrypted Packet
- A 1722a stream may contain 0 – 8 header extensions
- All packets in a stream shall use identical header extensions
- Header extensions shall always appear in a fixed order in the packet
- If no header extensions are used then streams shall use version 0 headers
- All future header extensions shall be quadlet based
- Add 8-bit field that is total number of quadlets in header extensions

Version 1 Header

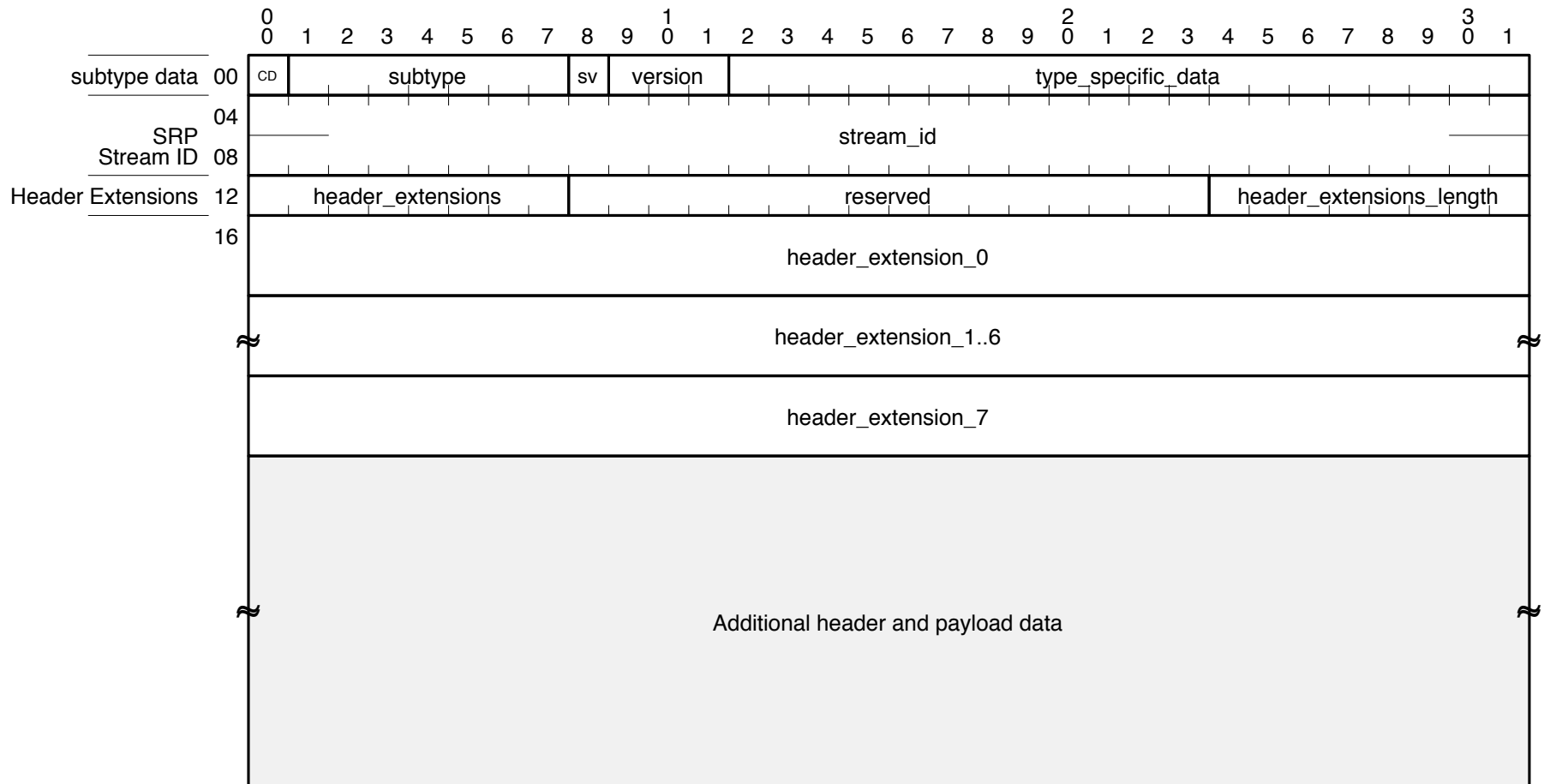


Header Extensions Detail

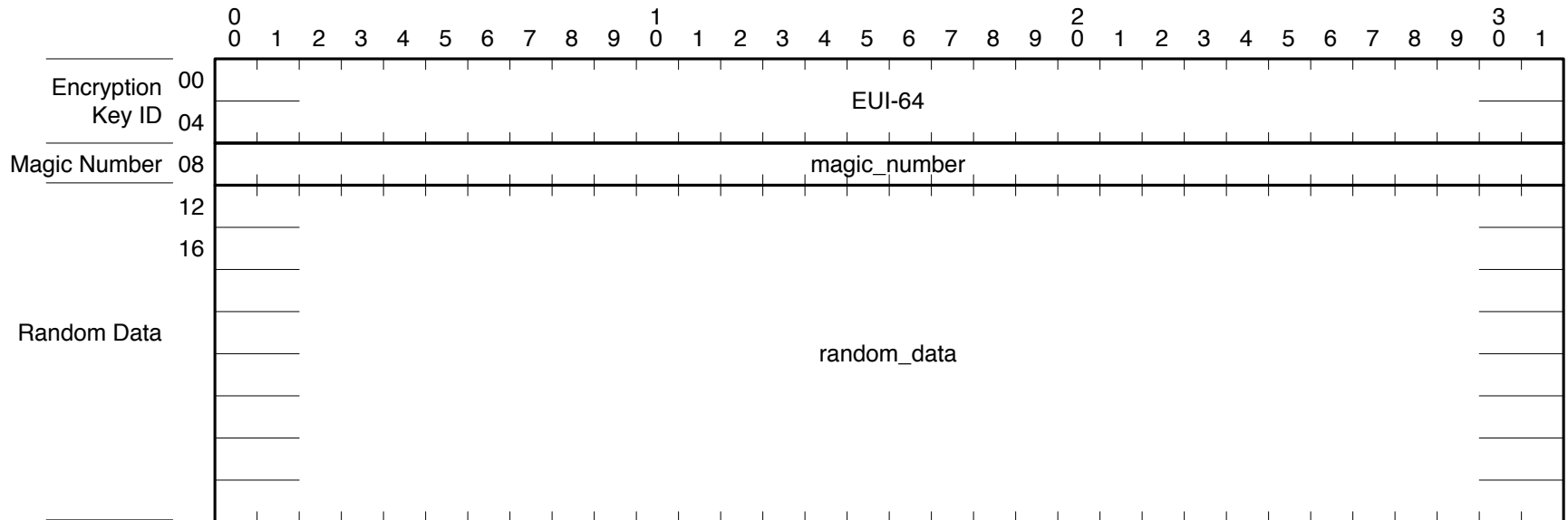


header_extensions

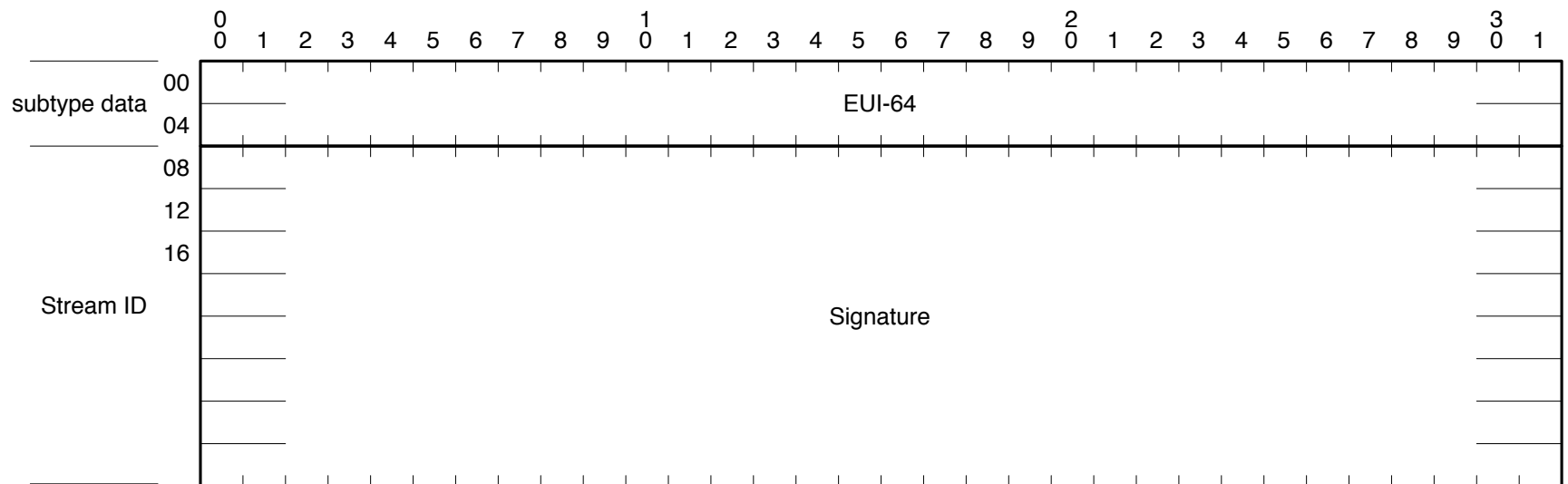
Version 1 Header with Extensions



Encryption Header



Signed Packet Header



Signed Packet Questions

- Signature includes all packet data from DA to end of packet not including the Ethernet CRC
- Do we need a trailer for Signed Packets?
- The packet signature should be at the end of the packets, especially if the packet is a data packet. Having to store the entire packet and then calculate the signature would increase latency.

Encrypted Packet Question

- Which sections of the packet are encrypted?
 - Magic Number
 - Random Number
 - StreamID (Stream ID needs to move to after header extensions)
 - Payload
- Do we need an encryption trailer to guarantee packet integrity?
- The encrypted payload should be a mapped block defined in the header_extensions bitmap. This would allow the sections of the packet to be arranged in the most reasonable manner.