

The background features a stylized globe of the Earth, rendered in shades of blue and white. The globe is surrounded by a dense field of glowing blue particles and lines, suggesting a digital or data environment. Several prominent white lines intersect across the globe, and a few red lines are also visible. The overall aesthetic is futuristic and high-tech.

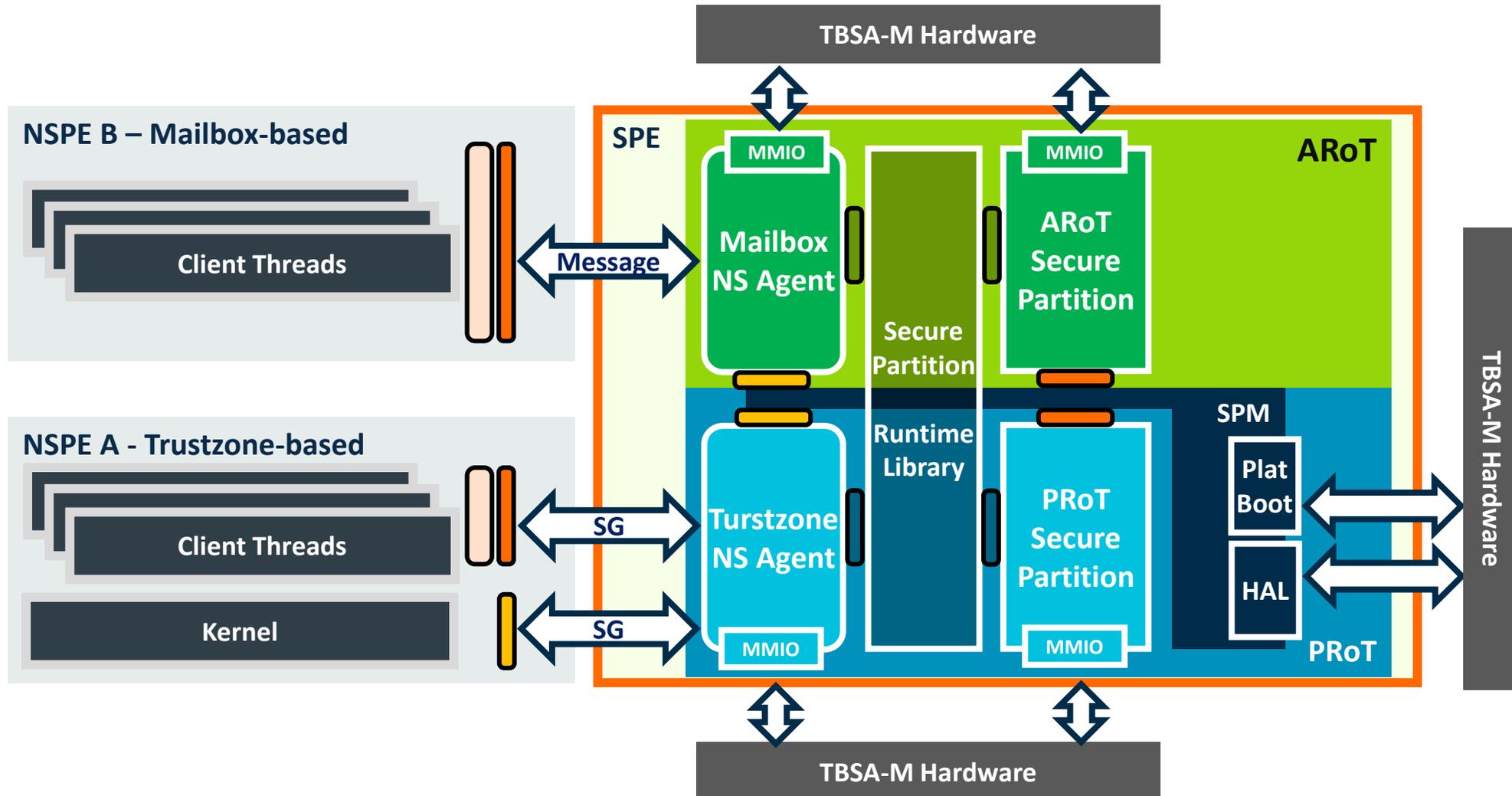
arm

# Mailbox Update Follow-up

Ken  
May 26<sup>th</sup>

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# Trusted Firmware-M Components



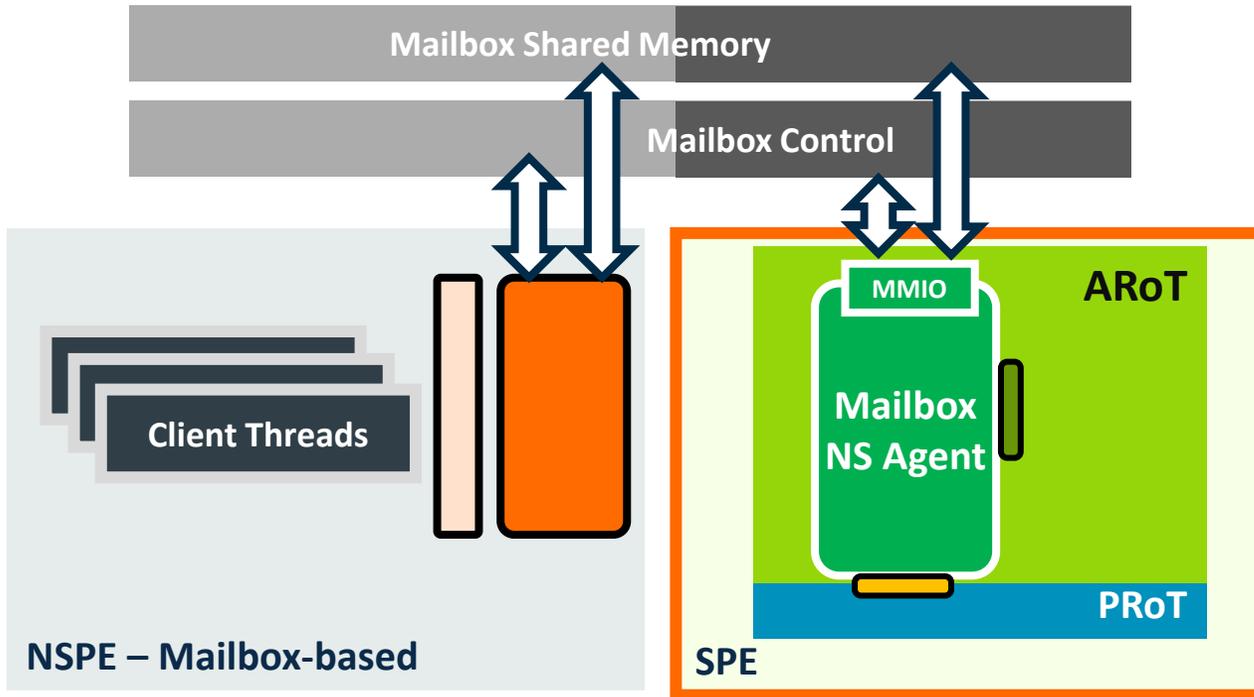
Developer API by encapsulating FF-M Interface

TFM Implementation-defined Interface

Runtime Interface

Firmware Framework-M Interface

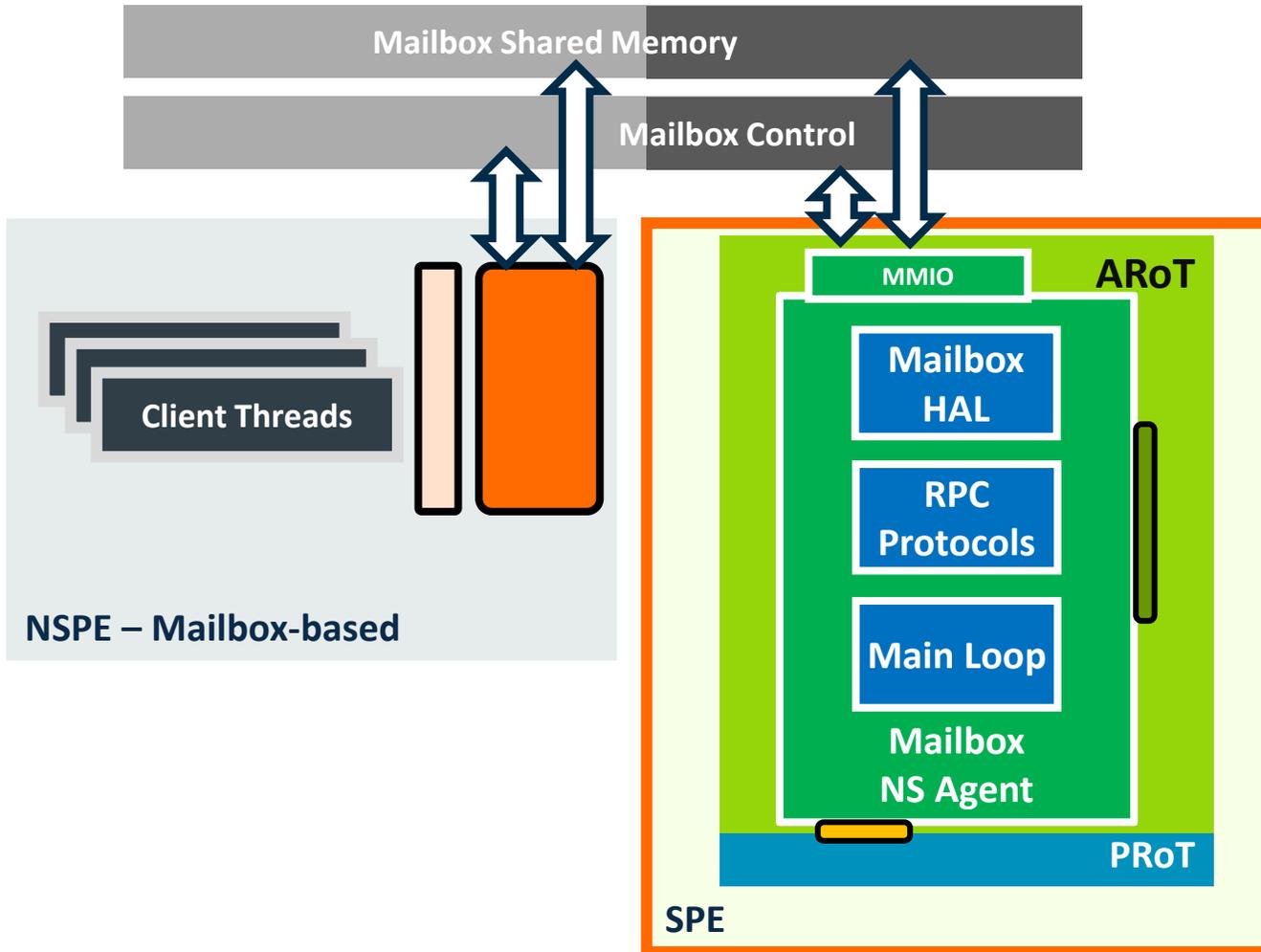
# Mailbox NS Agent



## Changes:

- The mailbox hardware is controlled through MMIO.
- The NS memory check is duty of Mailbox NS Agent now.
- The NS Agent API works asynchronously.
- The Customized NS Agent API supports NS Client identification.
- It is possible to have multiple Mailbox NS Agents.
- It is expected to be ARoT to isolate 3<sup>rd</sup> party RPC libraries from PRoT.

# Mailbox NS Agent look closer

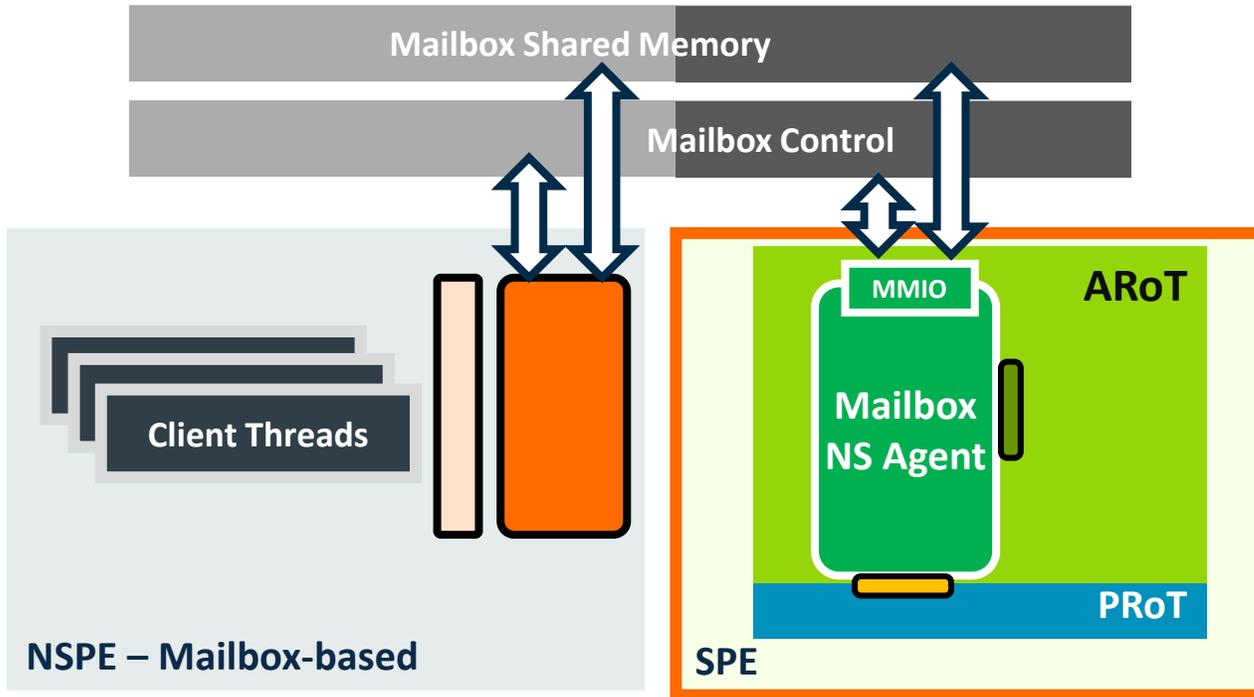


```
while(1)
{
    signals = psa_wait(WAIT_ALL, BLOCK);

    if (signals & MAILBOX_IRQ) {
        protocol_parse_inbox();
        agent_psa_call();
    }

    if (signals & AGENT_API_ACK) {
        create_protocol_reply();
        protocol_send_reply();
    }
}
```

# Mailbox NS Agent Plans



- Convert dual-core logic into partitions.
  - PSoC already did this.
- Decouple dual-core code out of SPM
  - Dual-core memory check
  - Interrupt handling logic
- Implement the proposed Agent API.

Initial docs: [https://tf-m-user-guide.trustedfirmware.org/technical\\_references/design\\_docs/mailbox\\_ns\\_agent\\_update.html](https://tf-m-user-guide.trustedfirmware.org/technical_references/design_docs/mailbox_ns_agent_update.html)

Still open for updates.

arm

Thank You

Danke

Gracias

Grazie

谢谢

ありがとう

Asante

Merci

감사합니다

धन्यवाद

Kiitos

شكرًا

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