Small Cell Integrated Backhaul (SIB) Application Solutions Kit (ASK) for the LX2160A and LS1046A Processors

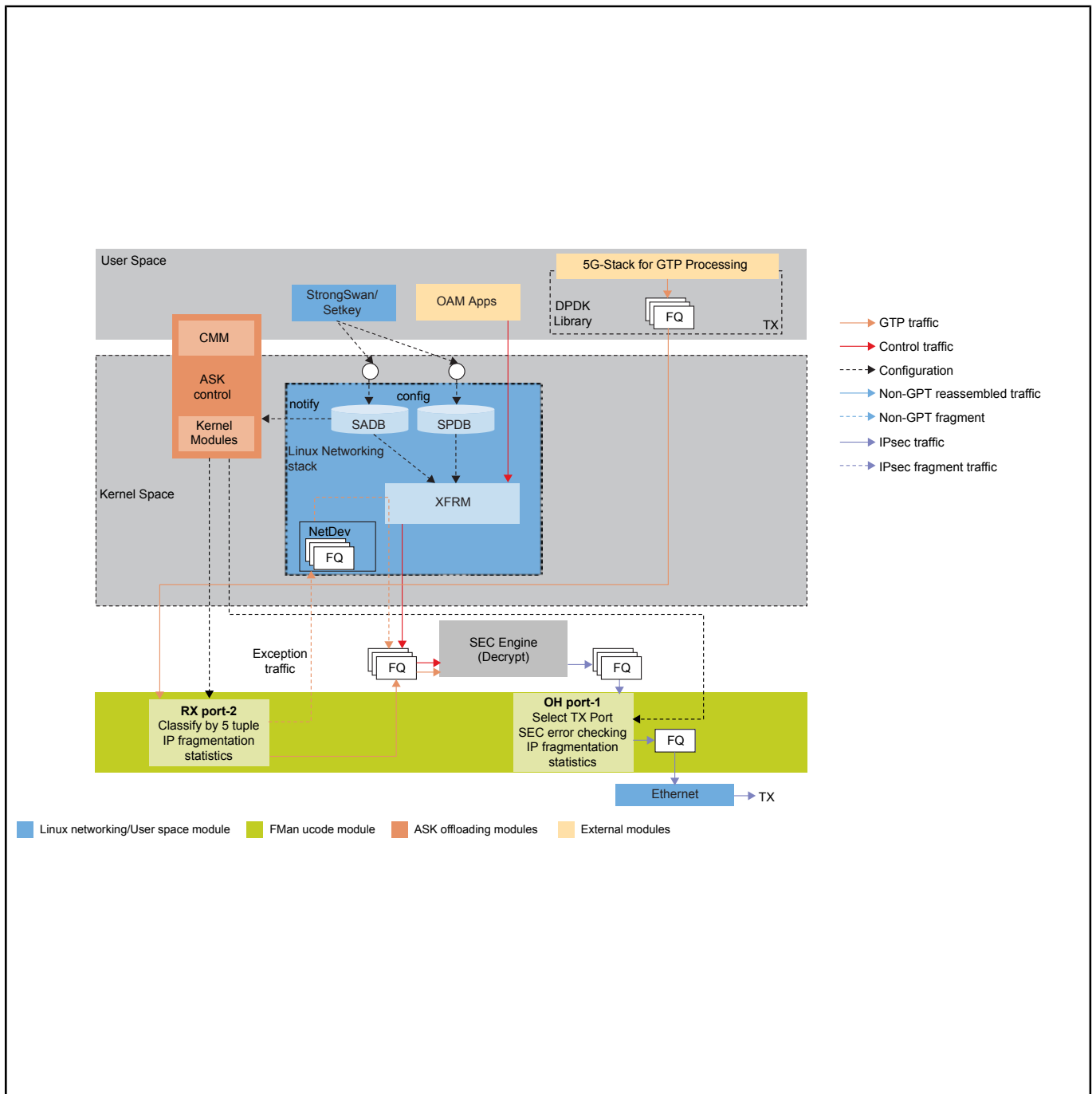## IPSEC-BASED-PACKET-TRANSPORT

Last Updated: Jul 15, 2025

This 5G small cell integrated backhaul application solutions kit (SIB ASK) offloads the main CPU by sending packets through NXP security hardware and through packet fastpath implemented in hardware or software. Use existing IPTABLES and firewall rules to configure. The CPU cycle savings from fastpaths provides large boosts in CPU utilization, packet throughput, packet latency and even power.

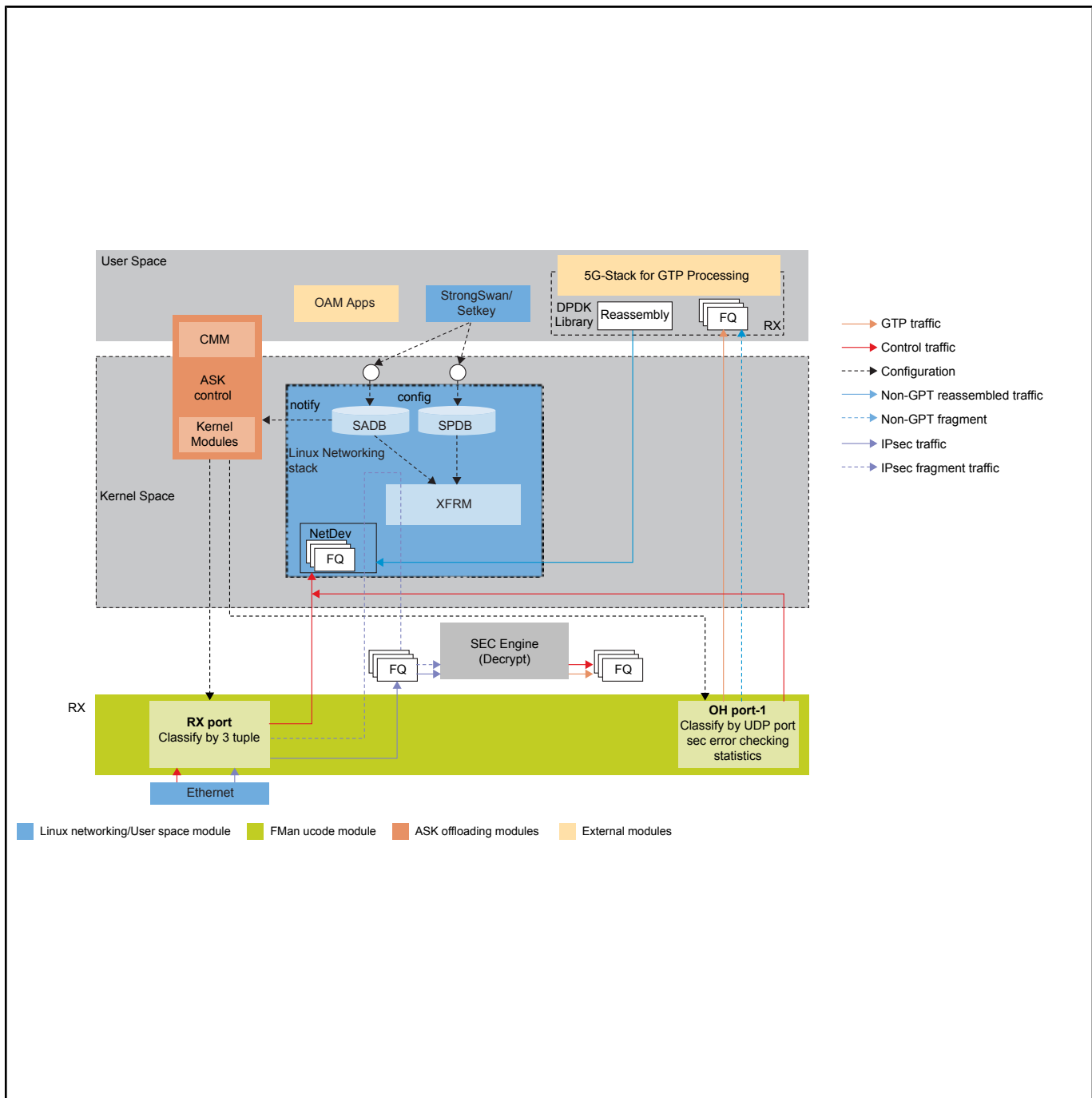Leverages Linux stack for initial connection processing and session learning.

Bulk of the data traffic is offloaded through fast path engine. Thus provides large boosts in CPU utilization, packet throughput, packet latency and even power.

Hardware based QoS(CEETM) offers strict priority queuing(SPQ) and weighted bandwidth fair scheduling(WBFS)

SIB-TX Block Diagram

SBI-RX Block Diagram

Note: The information on this document is subject to change without notice.