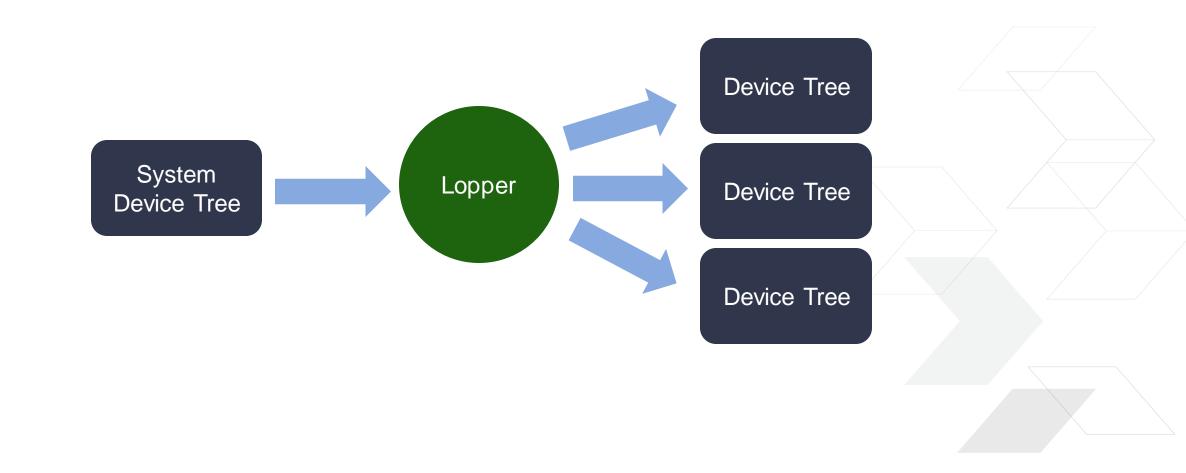
System Device Tree & OpenAMP RemoteProc

Bruce Ashfield Stefano Stabellini Tomas Evensen







System Device Tree & RemoteProc

> System Device Tree Goals for RemoteProc:

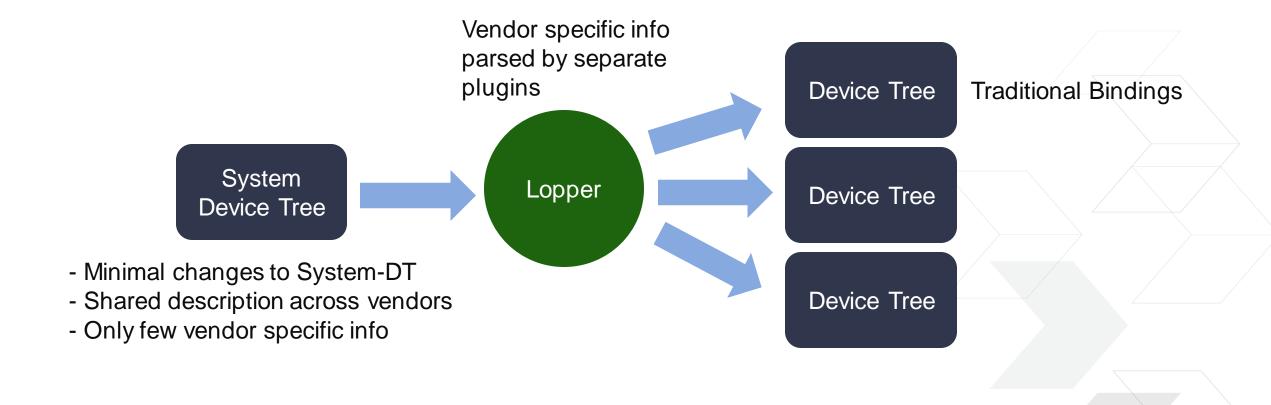
- >> RemoteProc information in a single place
- >> Minimalistic: provide as little information as possible to enable it
- >> Reduce vendor-specific details
- >> Allow current bindings in traditional device tree -- no changes required to existing device trees

> Vision:

>> Generic way of describing RemoteProc bindings in device tree



OpenAMP RemoteProc Flow with System-DT





OpenAMP RemoteProc Flow with System-DT

- > System Device Tree RemoteProc
 - >> Make use of common System Device Tree concepts
 - >> Reduces vendor specific information to a single 32-bit bitfield
- > Lopper generates traditional RemoteProc bindings via plugins



Current State of RemoteProc bindings

- > Existing RemoteProc bindings are fragmented across vendors
 - >> Many have similar concepts but subtly different
- > For System Device Tree, no changes are required at this moment
 - >> Lopper's plugins deal with vendors differences; one plugin per vendor
 - >> Decouple System Device Tree work from RemoteProc bindings work
- > Aligning RemoteProc bindings across vendors in the long term would:
 - >> make the implementation easier in Lopper; potentially remove the need for plugins
 - >> improve both the bindings and drivers in Linux and RTOSes

