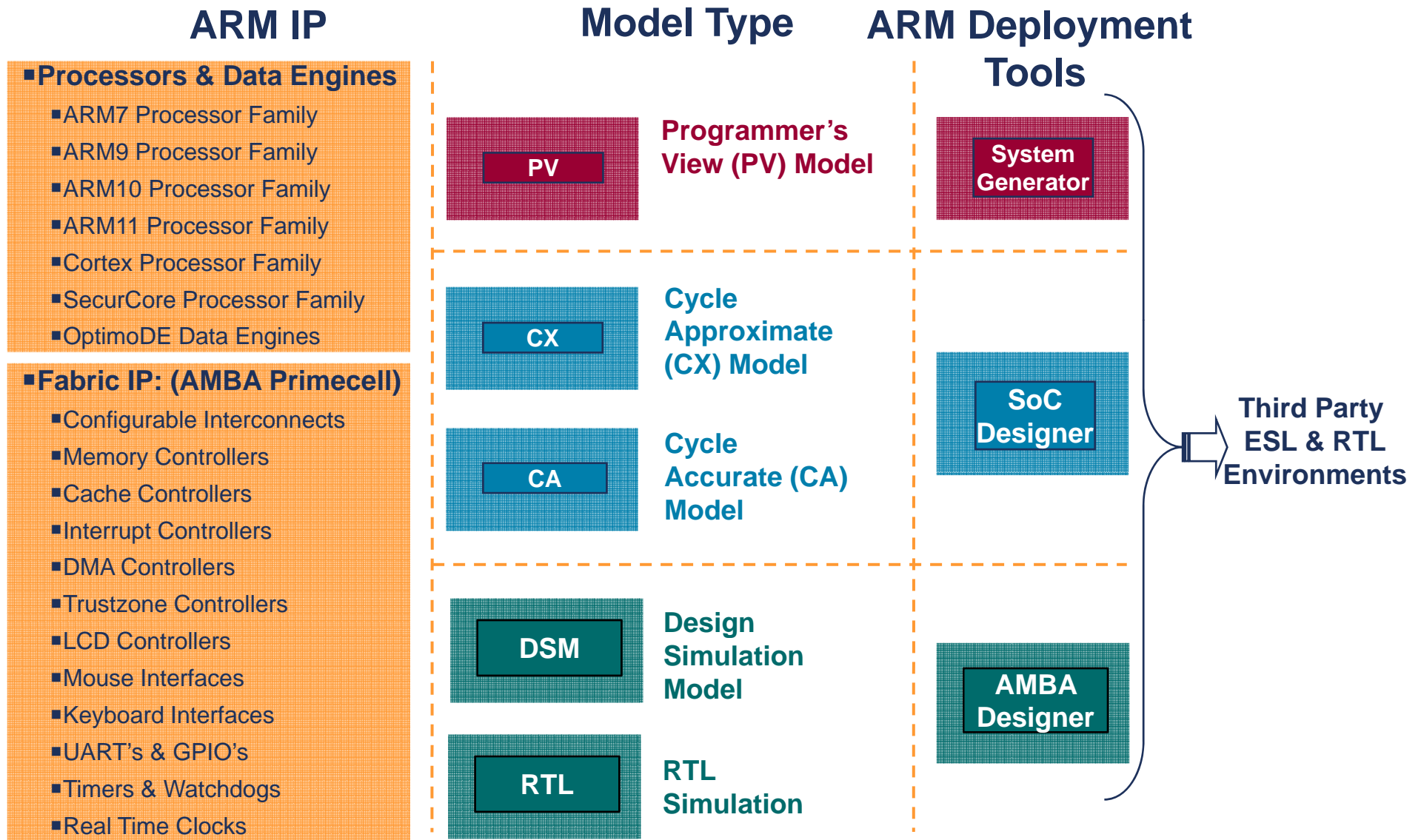




# Virtual platform and ESL IP exchange: Real world challenges and what's expected from OSCI TLM 2.0

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# ARM IP Models & Deployment Tools



# Current Challenges

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- ARM IP models need to be deployed in multiple and different ESL environments to build Virtual Platforms for application software development, link to Verification, architecture optimization & analysis, etc.
- We do our best by providing our APIs and AMBA Cycle Accurate SystemC TLM implementation openly on our website
- But that's not enough. Everyone has its own APIs
- Users spend sometimes up to 50% of the project time wrapping models and adapting different APIs
- We need a standard. We need interoperability

# What's Expected from OSCI TLM v2.0

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- Well, to be released! And the soonest possible
- What does it need to cover?
  - The Programmer's View level for now
  - We need standardized clean, efficient, fast and extendible communication mechanisms at the PV level
  - We don't expect it to cover all protocols features in a kind of generic mega PV Bus but should offer extensions mechanisms to do so
  - Protocol providers should provide their extensions to the standard. ARM intends to do so with AMBA PV extensions shortly after OSCI TLM v2.0 final release
- Is that all? Definitely not!
  - We need OSCI to work after on a standardized cycle accurate level
  - Link to debug should be covered but with the debug committee on board
  - Collaboration with the SPIRIT Consortium for IP-XACT for ESL

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# Thank You