

PICMG

Requirements Engineering Subcommittee (RES) Overview

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Background

- The AdvancedTCA and related specifications provide a quantum leap forward as an enabling framework for building carrier grade hardware and embedded software platforms for the telecommunications industry.
- This specification set is extensive and even the ATCA Base Specification alone contains a large number of options with an almost infinite number of combinations. In some areas the features have been defined in very exact language, but in other sections there is more flexibility and options to allow for different applications. That could lead to uncertainty about what the main stream implementation ways and options would be.
- While innovation and differentiation possibilities must exist, it is still possible to improve economies of scale by co-operatively streamlining a number of options offered for the platform hardware implementation.

Start of the RES Forum

- The RES (Requirement Engineering Subcommittee) got February 2006 a tremendous start – already within the first 2 months, 133 delegates had joined, representing 67 companies & organizations, and the numbers have grown also afterwards. The RES teleconference meetings are held on a weekly basis.
 - This open forum will address the most topical issue of the telecommunication platform industry, by decreasing the almost infinite number of options and combination of options, to promote enhanced interoperability.
 - Retaining room for value adding innovations and healthy competition to keep the technology progress and evolution alive
 - The forum is attended by great number of leading technology experts in ATCA and related technology areas.
 - Participation in the RES work process is very cost efficient since it is open and free for all the PICMG member companies.
 - Interested new companies are still welcome to send in their free format RES membership applications.

RES Key Event History

- The Call For Participation was sent 2006-01-13 to all the PICMG member companies.
- The RES Statement of Work v1.0 was agreed unanimously in the PICMG RES establishment meeting 2006-02-07 in Phoenix.
- PICMG RES is now the biggest interoperability related hardware platform forum. In August 2006, 69 RES member companies exist. They are represented by 136 RES member delegates. The RES weekly meeting cycle is progressing actively the interoperability work in PICMG.
- The second RES face-to-face meeting: 2006-10-20...21 in Santa Clara, California.

Key High Level Goals for RES

- To enhance the usability and interoperability of key AdvancedTCA related specifications, for the benefit of the whole telecommunication platform industry.
- To provide feedback and Change Requests within PICMG when enhancements or harmonization is needed, especially for the ATCA and AMC specifications.
- To drive the industry hardware architecture and technology options convergence.

Plans for PICMG RES Output

- A set of proposals for internally generated profiles, according to the prioritization agreed.
- A short description of the intended application space and the basic requirements.
- After extracting the requirements from the key specifications, a distilled Key Requirement List per each selected key specification.
- The key specifications having highest priority are the ATCA Base Specification and secondly the AMC Base Specification. Their related subsidiary specifications may follow the same process. MicroTCA and ATCA300 can follow when prioritized by RES.
- The comparison of the high-level profile requirements across the specification's key requirements. This involves populating the requirement matrix by validating the key "*shall*" requirements, selecting/promoting the appropriate "*should*" and "*may*" requirements, and quantifying values for requirements showing ranges.
- CRs to feed back the learning from this subcommittee to other PICMG subcommittees.
- Optionally the generation of high-level test procedures for such key requirements that are listed in Key Requirement List(s) for a specification, for related selected profile(s).

Draft high level RES schedule for 2H/2006

1. All PICMG 3.0 sections are enumerated and contributed for the PICMG 3.0 R3.0 work group for approval.
 2. ATCA Communication Server profile is discussed.
 3. A first Key Requirement List for PICMG 3.0 exists.
- The work plan for 1H2007 contains e.g. the generation of a Key Requirement List for the AMC Base Specification: Start 1Q07, ready before the Globalcomm 2007 in June.

The RES Member Companies

Acbel Polytech
ADLINK Technology
Adtron
Advanet Inc.
Agere Systems
Alcatel
Alliance Systems
AMD
Artesyn
Astek Corporation
AudioCodes
BATM
Carlo Gavazzi Computing Solutions
Comtel
Continuous Computing
CorEdge Networks
Crystal Group
Cypress Point Research
Diversified Technology
ELMA
ept GmbH & Co
Ericsson
ERNI Elektroapparate GmbH

ESO Technologies
FCI
Flextronics
Foxconn
General Micro Systems
Hewlett Packard
Huawei
IBM
Ideal Jacobs
IDT
Inova
Intel
Interphase
Kontron
Lucent
Motorola
NMS Communciations
Nokia
Nortel
NTT
OKI
Omni Device
Optovia

Pentair Electronic Packaging
Performance Technologies
PICMG Japan
Pigeon Point Systems
Pinnacle
Positronic
Radisys
Rittal / Kaparel
Sanmina-SCI
SBS
Southco
Stargen
Sun
Tekelec
TietoEnator Telecom Partner AB
Tyco
UNH InterOperability Lab
Wickenby Consulting
Wipro Technologies
Xilinx
XTECH
Yamaichi
Znyx Networks



Membership information level: July 2006

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