

**Minutes of Pre-bid Meeting held on 29-07-2011 at 2.30 pm at CDAC  
CTSF Conference Room  
CDAC Knowledge Park, Bangalore 560 038.**

**Tender No.** C-DAC/EOI/FPGA Cluster/11-12 dated 22.07.2011 due on 22.07.2011

**Name of the Work:** Notice Inviting “Expression of Interest” to provide a FPGA cluster based on Xilinx Virtex6 LX550T/ Equivalent FPGA at CDAC, Knowledge Park.

**Members Present**

1. Dr. P. K Saxena, Director, SAG, DRDO	..	Chairman
2. Dr. P V Ananda Mohan Technical Advisor, ECIL	..	External Member
3. Dr. Sarat Chandra Babu Executive Director, CDAC, Bangalore	..	Invited Member
4. Mr. Rajesh Pillai, SAG, DRDO	..	Invited Member
5. Ms. P M Sobha, CDAC, Bangalore	..	Invited Member
6. Mr. A. David Selvakumar Programme Coordinator	..	Member
7. Mr. C.M. Kulkarni Sr. Purchase Officer, CDAC, Pune	..	Member
8. Mr. K Gokul Das, CDAC, Bangalore	..	CAO & Head MMG,
9. Mr. S.Asath Rao, CDAC, Bangalore	..	Purchase Executive
10. Mr. N Vijendren, CDAC, Bangalore	..	Member-Convener

Dr. B B Prahalad Rao could not attend the meeting.

**Representatives of Firms Present**

1. Mr. Nilesh Mudgal	..	M/s. Intrinsic Solutions, Bangalore
2. Mr. Venugopalacharyulu & Team	..	M/s. CoreEL Technologies (I) Pvt Ltd., Bangalore
3. Mr. M.R. Gopinath & Team	..	M/s. Deepti Marketing Services, Bangalore
4. Mr. Madhu Kumar & Team	..	M/s. Picossem Technologies, Bangalore.

The copy of attendance sheet is attached herewith.

1. Initiating the discussion, Dr. P. K. Saxena, Chairman welcomed the participants. It was explained that the purpose of this Pre-bid meet is to inform the bidders regarding various important provisions of the EOI documents and also to clarify any queries that the bidders may have regarding technical or commercial issues in the subject bidding documents.

2. Mr. David Selvakumar, Programme Coordinator explained the scope of the project requirements, in brief.
3. Queries were raised by the prospective bidders during the meeting and the clarifications were given to them by the programme coordinator.
4. The following decisions/recommendations were made:
  - The FPGA system should consist of a minimum of two boards so that if one FPGA board fails, the other board can be used for development.
  - The vendors should quote for the full system in two parts each consisting of 21 user programmable FPGA cluster with similar configuration. In the first phase, C-DAC may procure 21 user programmable FPGA (Xilinx Virtex6 LX550T / equivalent) cluster and use it for evaluating the performance as well as its suitability for the project. Based on the satisfactory performance of the system a repeat order may be placed on the same vendor for the same quantity with the same price and terms & conditions as mentioned in the first PO.
  - The vendors would quote the prices valid for a period of two years from the closing date of submission of quotations.
  - The FPGA System should be configurable to solve more than one problem, in parallel, across different FPGAs.
  - While submitting Expression of Interest documents to C-DAC, the Vendors would submit the minimal board of the FPGA system for benchmarking by C-DAC. Based on this result, the Purchase Committee will proceed further with the short listed vendors. C-DAC application cores will be used for bench marking and not the standard FPGA benchmarks. Vendors will provide all support to the committee during benchmarking if so desired by C-DAC.
  - As far as cooling system and racks are concerned, any kind of cooling system can be provided for heat dissipation (Heat sink / fan / liquid cooling), but such arrangement would be part of the system proposed. The bidders were requested to provide the details of the infrastructure required, if any, from CDAC.
  - The standalone FPGA system should include host computer system to configure and monitor the FPGAs. If the FPGA system is not stand alone and requires external host computer for FPGA configuration, then the vendors should also include the server with this FPGA system. This server would be used to configure and monitor the FPGAs. Each FPGA based board in the FPGA cluster should support minimum of 4GB DDR3 RAM.

The server / host computer system specification is given below

Processor – One processor with 4 or more cores  
Processor Speed – 2.4GHz or better  
Motherboard – Express chipset on board Audio/Video/LAN Preferred  
RAM – 8 GB (2x4GB) DDR3 expandable to 16GB  
HDD – SATA II 1TB or more (min 7200 RPM)  
Keyboard – USB standard  
Mouse – USB optical mouse  
Monitor – 17” wide screen flat Monitor  
Operating System – Windows / Linux

- The server should be rack mountable in a 19" rack and shall be of 4U size preferably. Space shall exist for populating the rack with more such modules. The equipment shall have mother board construction to facilitate plugging of additional modules. The power supply shall be common however".
- The FPGA system should be designed and integrated so as to run it continuously at a stretch for at least one month. (Heat dissipation and power supply issues should not interrupt this 24X7 functionality).
- The Vendors should include warranty of the FPGA system for a period of 3 years in their quote. The Committee also proposed that the vendors should quote for the 4<sup>th</sup> and 5<sup>th</sup> year extended warranty rates in terms of percentage of the basic cost. These rates would not be changed during the extended warranty period. However, C-DAC reserves the right to enter or not to enter for 4<sup>th</sup> and 5<sup>th</sup> year warranty.

The meeting concluded with thanks to the participants for the active participation.

Sd/-  
Committee Members

**CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING  
KNOWLEDGE PARK, BANGALORE**



Centre for Development of Advanced Computing, Bangalore



PRE-BID ATTENDANCE RECORD

1. Tender Notice Number : C-DAC/EOI/FPGA Cluster/11-12  
Dated: 22.07.2011
2. Name of the Work : Notice Inviting "Expression of Interest"  
to provide a FPGA Cluster based on Xilinx  
Virtex6 LX550T / Equivalent FPGA at  
CDAC, Knowledge Park.
3. Pre-bid Meeting date & time : 29.07.2011 @ 2.30 pm

We, the undersigned representatives, attended the Pre-bid meeting of the above tender at 14.30 hours on the above date, and hereby certify that we are satisfied with the conducting of Pre-bid meeting.

Sl. No.	Bidding Company Represented	Name of the Representative	Signature / Phone no.	Remarks
1	Intrinsic solutions Bangalore	Dini Group	9620048541	
2	Coreel Technologies Bangalore	Cokul Sciengines	964128322	
3	Coreel Tech. Bangalore	G. Venugopal sci engines	9980319665	
4	Coreel Tech. Bangalore	Shiv Ganitha	9686445335	
5	Daakshinashree Semias Bangalore	Mr. Lakshmi	984540465	
6	" - "	ARUN KUMAR P.	9739460035	
7	Picosem Technology	Madhu Komay	9663254778	
8	Picosem Technology	Rajesh		
9				
10				

Signature, Name and Designation of Pre-Bid meeting Committee Member(s):

 Kishore Das Ramesh Das (Dr. Ananda Mohan)	 C.M. Kulkarni  (Dr. P. Saranya)	 N. Sarath Chandra Reddy N. Mysal Nisendran. N
 Anand Das		