

Code No: G6804/R13

M. Tech. I Semester Supplementary Examinations, December-2016

CPLD AND FPGA ARCHITECTURES AND APPLICATIONS

(Common to VLSI &ES, ES & VLSI, VLSID & ES, ES & VLSID, VLSI,
VLSID, VLSISD, VLSI&ME)

Time: 3 hours

Max. Marks: 60

*Answer any FIVE Questions
All Questions Carry Equal Marks*

1. a Explain about PROM and implement $f1 = \Sigma (0,1,2,3,4,6,8)$ and $f2 = \Sigma (0,2,3,4,5)$
b List out the applications of FPGAs.
2. Explain different programming technologies in FPGA
3. Draw the schematic diagram of Xilinx based XC 4000 CLB and describe its functional operation.
4. Draw the architectures of ACTEL based FPGAs and compare their performance
5. Draw the architectures of ACTEL based FPGAs and compare their performance.
6. Draw and explain the routing architecture of field programmable gate arrays.
7. Explain about a fast DMA Controller in detail
8. Design an accumulator with ACT architecture.
