

ECE-585 – Microprocessor System Design
Test Plan – Group 12
Data structure of the Last Level Cache (LLC)

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Cache Parameters:

- 1) Cache Size: 16 MB
- 2) Line Size: 64 bytes
- 3) Associativity: 16
- 4) Number of sets: $(\text{Cache size} * 1024 * 1024) / (\text{Line size} * \text{Associativity})$

Address bits split up: (32 bits)

- 1) Offset: 5 – 0
- 2) Index: 19 – 6
- 3) Tag: 31 - 20

Data Structure:

Valid	Dirty	Mesi	Tag	Index	Offset
1 bit	1 bit	2 bits	12 bits	14 bits	6 bits