

2017 294 6

**“云计算和大数据”重点专项
2018年度项目申报指南**

2006-2020

2018

4

31

1

| | | | | |
|-------|------|---|-----------|----|
| | | 5 | 2016—2020 | |
| 2016 | | 4 | | 12 |
| 15 | 2017 | 4 | | 15 |
| 15 | 2018 | 4 | | 20 |
| 20-40 | | | | |

| | | | | | |
|-----------|------|-----|------------|-----|-----|
| 1.2 | | NVM | TB | | |
| | | | | | I/O |
| | RDMA | | | | TB |
| | | 8 | | | |
| TB | | | | | |
| 1 μ s | | | 10 μ s | | 8 |
| 40GB/s | | ops | 5000 | /s | ops |
| 1000 | /s | ZB | | 1-3 | |

1.3

CPU

CPU

CPU-GPU

CPU-GPU

GPU SM

kernel

8

16

GPU

CPU/GPU

GPU

2

CPU

5

1.4

GTEPS
1TFlops
2-3
2
1.5
/ /
/ /
/ /
256
2TB

10

10GTEPS

50

10

X86

1.6

20%

6

2.

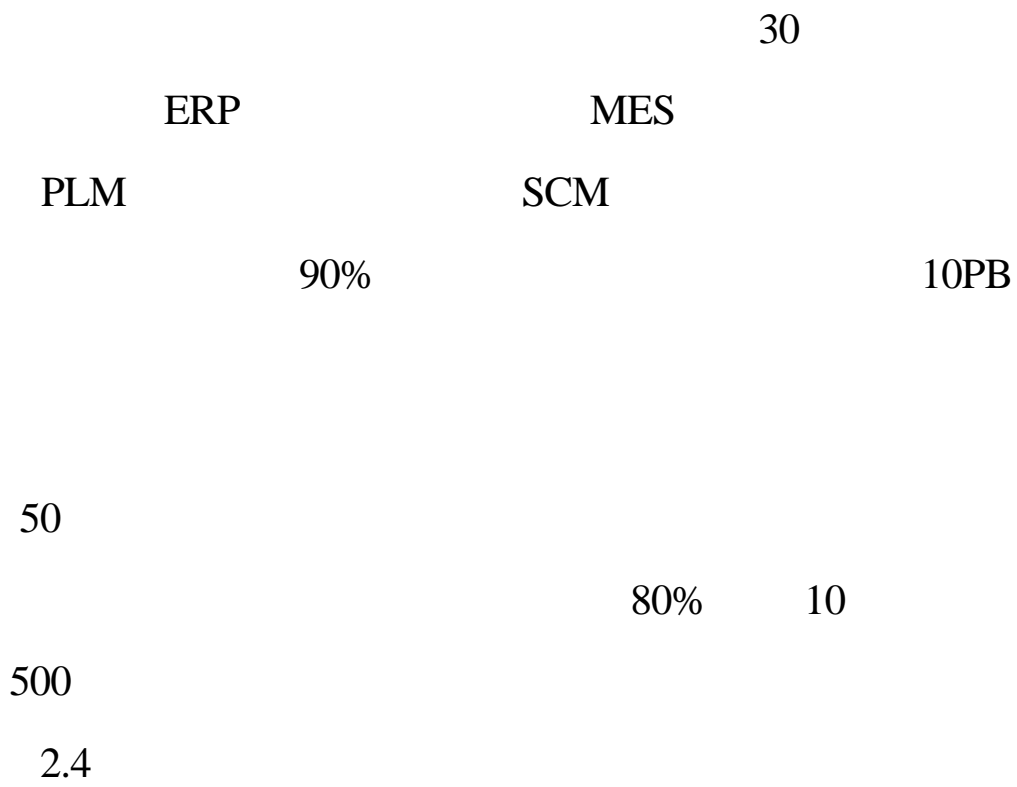
2.1

10

1000

2.2

1000
2 100
3
1000 100
10
70% 70%
50%
2.3



10

80%

80%

3-5

2.5

100

100

1

1000

10

20%

10

100

10

3.

3.1

+

20

3.2

11

50%

1

80%

5

PB

3.3

12

| | | | |
|---------|----------|-------|------|
| | | | MOOC |
| | | - | |
| | 90% | | 87% |
| | | NDCG | |
| NDCG@10 | 86% | | |
| | 90% | | |
| | 100 | 10000 | |
| 1000 | | 100 | 10 |
| | VR/MR/AR | | 20 |
| | 300 | | 30 |
| | | 5 | |

3.4

3

90%

3

90%

95%

90%

95%

95%

10

3.5

14

100 10
10 1
98%
24 1000
72
1
2

4.

4.1

+

15

| | | |
|-------------|---------|-------|
| | Android | Linux |
| OpenStack / | | |
| 10 | 100 | 1000 |

4.2

20m²

60fps

90%

5

500

1TB/s

6GB/s

4GB/s

50

4.3

90%

5

200

4.4

3

95%

150