2030

2021

2021

4

21 5.34

3

4

2 2

3

3

4

2 2

4

2

4

2 2

PaddlePaddle MindSpore 4

50% 3

+

CPU-GPU 100

CPU

10

TF32/FP32/BF16/FP16/INT16/INT8/INT4

8 128

500GB/s 8 0.9

300W 32 400 TFLOPS 16

800 TFLOPS 8 1600 TOPS

RRAM SRAM

C j —

PaddlePaddle MindSpore 4

100

EDA

AI EDA 7nm

14nm 28nm 32nm

10% PPA

85% 5% PPA

30%

EDA

10%

1000

10%

CAM

10%

3

90%

300

90%

95%

200

2

2000 100

3000

18

95%

1000

-H5 30

10

90%

4 2000

95% 0.5

95%

±20mm 80%

3

2

10

98% 50%

2

1

8

1000 10