

Normalized Speedup

25

20

15

10

5

0



Niubility



PIM-Base



GeneF+MP



GeneF+MP&PR

4.7x

1.66x

2.69x

1.00

4.70

7.80

20.99

(a) Count Stage

4.6x

1.68x

2.81x

1.00

4.60

7.73

21.72

(b) Determine Stage