Raspberry Model B Pi 3 Üzerinde Raspbian Buster with desktop ve Raspbian Buster Lite İşletim Sistemlerinde Çalışan Test Sonuçları

4 adet seçilmiş benchmark 2 farklı Raspbian konfigürasyonunda test edildi. Sonuçlar gösteriyorki Raspbian Lite minimum konfigürasyonda işletim sistemi CPU 'yu daha verimli kullanmaktadır. Testlere göre Read/Write I/O işlemlerinde Raspbian Buster maximum konfigürasyonu Raspbian Lite minumum konfigürasyonundan daha yavaş işlem sonuçlamıştır.

driveSpeed Bencmark

• Raspbian Buster

200 Files	Writ	te		Read			Delete	;
File KB	4	8	16	4	8	16	secs	
MB/sec	0.83	0.17	0.42	3.5	1	6.05	11.73	
ms/file	4.96	46.82	39.26	1.1	7	1.35	1.40	0.028

• Raspbian Lite

```
200 Files
          Write
                                      Delete
                         Read
              8
File KB
                   16
                         4
                              8
         4
                                  16
                                       secs
MB/sec
             2.15 4.93 5.45
                                8.79 12.71
        1.14
ms/file 3.60 3.81 3.32 0.75
                              0.93
                                     1.29 0.022
```

lanSpeed Benchmark

• Raspbian Buster

200 Files Write			Read			Delete	
File KB	4	8	16	4	8	16	secs

MB/sec 22.71 25.36 45.61 131.82 229.72 332.28 ms/file 0.18 0.32 0.36 0.03 0.04 0.05 0.025

• Raspbian Lite

 200 Files
 Write
 Read
 Delete

 File KB
 4
 8
 16
 4
 8
 16 secs

 MB/sec
 26.21
 39.00
 65.50
 151.39
 240.73
 351.25

 ms/file
 0.16
 0.21
 0.25
 0.03
 0.03
 0.05
 0.023

MP-MFLOPS Benchmark

• Raspbian Buster

Raspbian Lite

2 Ops/Word 32 Ops/Word KB 12.8 128 12800 12.8 128 12800 **MFLOPS** 1T 90 88 338 341 90 333 2T 181 173 676 682 675 175 349 305 1293 1279 1265 4T 321 **8T** 345 332 315 1304 1297 1301

Results x 100000, 0 indicates ERRORS

1T 76406 97075 99969 66014 95363 99951

2T 76406 97075 99969 66014 95363 99951

4T 76406 97075 99969 66014 95363 99951

8T 76406 97075 99969 66014 95363 99951

RPiHeatMHz_Bencmark

• Raspbian Buster

Seconds

0.0	600 scaling MHz,	600 ARM MHz, temp=43.5'C
1.0	600 scaling MHz,	600 ARM MHz, temp=44.0'C
2.1	600 scaling MHz,	600 ARM MHz, temp=43.5'C
3.2	600 scaling MHz,	600 ARM MHz, temp=44.0'C
4.3	600 scaling MHz,	600 ARM MHz, temp=44.0'C
5.3	600 scaling MHz,	600 ARM MHz, temp=44.0'C
6.4	600 scaling MHz,	600 ARM MHz, temp=44.0'C

- 7.5 600 scaling MHz, 600 ARM MHz, temp=44.0'C
- 8.6 600 scaling MHz, 600 ARM MHz, temp=44.0'C
- 9.7 600 scaling MHz, 600 ARM MHz, temp=44.0'C
- 10.8 600 scaling MHz, 600 ARM MHz, temp=44.0'C

• Raspbian Lite

Seconds

10.6

600 scaling MHz,

0.0 1200 scaling MHz, 600 ARM MHz, temp=46.2'C 1.0 600 scaling MHz, 600 ARM MHz, temp=46.2'C 2.1 600 scaling MHz, 600 ARM MHz, temp=45.6'C 3.1 600 scaling MHz, 600 ARM MHz, temp=46.2'C 600 scaling MHz, 4.2 600 ARM MHz, temp=46.2'C 5.3 600 scaling MHz, 600 ARM MHz, temp=46.2'C 6.4 600 scaling MHz, 600 ARM MHz, temp=45.6'C 7.4 600 scaling MHz, 600 ARM MHz, temp=46.2'C 8.5 600 scaling MHz, 600 ARM MHz, temp=46.2'C 600 ARM MHz, temp=46.2'C 9.6 600 scaling MHz,

600 ARM MHz, temp=46.2'C