







0.08	0.02	0.04	0.06	19	14.5	14.5	19
0.08	0.04	0.06	0.08	19	14.5	19	19
0.08	0.06	0.08	0.1	19	19	19	19.8
0.08	0.08	0.1	0.12	19	19	19.8	23.4
0.08	0.1	0.12	0.14	19	19.9	23.4	23.4
0.08	0.12	0.14	0.16	19	23.4	23.4	25.4
0.08	0.14	0.16	0.18	19	23.4	25.6	27.9
0.08	0.16	0.18	0.2	19	25.5	27.9	27.9
0.1	0.02	0.02	0.02	19.8	14.5	14.5	14.5
0.1	0.02	0.04	0.04	19.7	14.5	14.5	14.5
0.1	0.02	0.04	0.06	19.7	14.5	14.5	19
0.1	0.04	0.06	0.08	19.8	14.5	19	19
0.1	0.06	0.08	0.1	19.8	19	19	19.8
0.1	0.08	0.1	0.12	20	19	19.9	23.4

## 4 Conclusion

This paper has suggested an enhanced LPI Control Mechanism to improve the energy efficiency between Ethernet network interface devices and Ethernet switches. This mechanism can address the issues that the existing adaptive synchronous coupling mechanism embraces because the switch performs LPI mode through adapting to the traffic loads. The analysis has shown that the suggested mechanism enhances the overall performance by reducing the energy consumption rate compared to the existing mechanism, keeping the similar average packet delay to the existing mechanism. The performance analysis has been going on for the environment that each link has different input traffic characteristic.

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