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Yue Wu^{*}
1600012704@pku.edu.cn

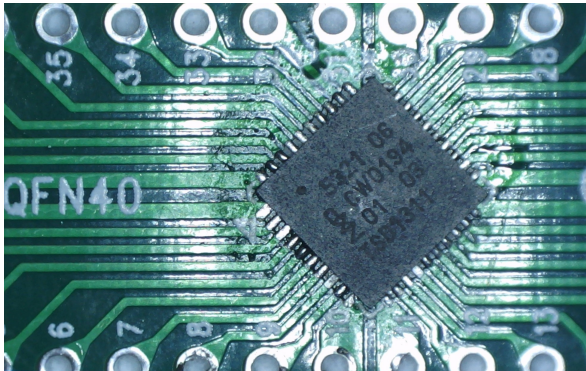


Figure 1: PN532

1. SECTION ONE

Since the processor translate messages of two protocol, one is from PN532 data sheet and the other is the protocol we design. Besides of strong processing ability, it also need some GPIO to control the coil selection and power on-off. For better performance and fewest foots, we use decoder such as 74HC138 to minimize foot use and use latch to control power. We have STC15W4K48S, QFP44 package, up to 33MHz 1T 8051 micro-controller.

1.1 This is subsection

We have several advantages in providing a platform for IoT devices to work elegantly and efficiently, and probably to unify on-table devices with its manipulating mode, in a rather low cost and low complexity.

1.1.1 this is subsubsection

2. PAPER READING

2.1 Intensive

[11] [8] [2] [3] [5] [9]

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2.2 extensive

[12] [7] [10] [4] [1] [6] [13]

3. REFERENCES

- [1] S. Fei, A. Kerne, A. Jain, A. M. Webb, and Y. Qu. Positioning portals with peripheral nfc tags to embody trans-surface interaction. In *Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces, ITS '13*, pages 317–320, New York, NY, USA, 2013. ACM.
- [2] A. K. M. J. Fisher. Wireless power transfer via strongly coupled magnetic resonances. *Science*, (5834):83, 2007.
- [3] B. C. H. S. Goldstein. Magnetic resonant coupling as a potential means for wireless power transfer to multiple small receivers. *IEEE Transactions on Power Electronics*, (7).
- [4] C. F. Huang and C. L. Lin. Design of antennas and circuit for integrating rfid and wireless charging systems. In *The 8th European Conference on Antennas and Propagation (EuCAP 2014)*, pages 1580–1581, April 2014.
- [5] J. J. Katabi. Magnetic mimo: how to charge your phone in your pocket. *ACM MobiCom '14*.
- [6] H. J. Kim, J. Park, K. S. Oh, J. P. Choi, J. E. Jang, and J. W. Choi. Near-field magnetic induction mimo communication using heterogeneous multipole loop antenna array for higher data rate transmission. *IEEE Transactions on Antennas and Propagation*, 64(5):1952–1962, May 2016.
- [7] W. S. Lee, D. Z. Kim, and J. W. Yu. Multi-functional high-isolation dual antenna for controllable wireless charging and nfc communication. *Electronics Letters*, 50(13):912–913, June 2014.
- [8] V. C. O. Ok. A survey on near field communication (nfc) technology.
- [9] L. S. K. K. Perreault. Wireless power hotspot that charges all of your devices. *ACM MobiCom '15 Proceedings of the 21st Annual International Conference on Mobile Computing and Networking*, pages 2–15, 2015.
- [10] G. Ritrovati, G. D. Maso-Gentile, C. Scavongelli, and M. Conti. Active role of a nfc enabled smartphone in ev-evse charging process. In *2014 IEEE International Electric Vehicle Conference (IEVC)*, pages 1–8, Dec 2014.
- [11] A. S. W. W. Smith. Enabling seamless wireless power delivery in dynamic environments. *Proceedings of the IEEE2013*, 101(6):1343–1358, (6):1343–1358, 2013.
- [12] E. Strommer, M. Jurvansuu, T. Tuikka, A. Ylisaukko-oja, H. Rapakko, and J. Vesterinen. Nfc-enabled wireless charging. In *2012 4th International Workshop on Near Field Communication*, pages 36–41, March 2012.
- [13] J. Ylinen, M. Koskela, L. Iso-Anttila, and P. Loula. Near field communication network services. In *2009 Third International Conference on Digital Society*, pages 89–93, Feb 2009.