MINISTRY OF EDUCATION AND TRAINING

HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

GRADUATION PROJECT DESIGN

Full name: **Pham Anh Duc** Student ID: **20121570**

Course : **57th**

School: **Electrical Engineering**

Department : **Instrumentation and Industrial Informatics**

1. Design title / topic

Design of energy recovery from new generation of Wifi circuit.

2. Initial data

With the development of Wifi technology, Wifi is now covered everywhere. Wifi has evolved to the fifth generation – IEEE 802.11ac with two bands of 2.45GHz and 5.8GHz.

The topic is to design a circuit recovering energy from new generation Wifi and converting to DC voltage, operating at two bands of frequency 2.45 GHz and 5.8 GHz with input power of -5 ÷ 0 dBm. .

3. Contents of calculation and design

Design an AC-DC converter block, operating at two bands of 2.45 GHz and 5.8 GHz, with low input power Pin = -5 ÷ 0 dBm.

Design a multi-band and multi-directional received microstrip antenna, operating at two bands of 2.45GHz and 5.8GHz.

Integrate the AC-DC converter block with the dual-band antennas designed to obtain a complete energy recovery circuit from new generation of Wifi.

4. Instructor

Dr. Le Minh Thuy

5. Assignment date: 10/01/2017

6. Completion date: 31/05/2017

Date:

DEPARTMENT CHAIRMAN
(Signature and full name)

INSTRUCTOR
(Signature and full name)

STUDENT
(Signature and full name)

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