

Course outline

How does an NPTEL online course work?

WEEK 1 Introduction to IoT

WEEK 2 Addressing the Power challenge

Introduction to RFID

RFID DEMO

RFID Theory - 01

RFID Theory - 02

RFID Theory - 03

Energy harvesting - 01

Energy harvesting - 02

Energy harvesting - 03

Quiz: Week 2 Assignment 2

LT Spice model for LTC3588

Weekly Feedback Form

Week 2 - Lecture notes

Week 2 Assignment 2 Answers

WEEK 3 Addressing the Power challenge continued and System Design for low power

Week 4 Sensors and actuators

WEEK 5 Power management algorithms

WEEK 6 IoT protocols - MQTT, COAP, and Websockets with associated applications

WEEK 7 Low power wireless technologies - BLE, IEEE 802.15.4e, Wi-Fi

WEEK 8 Low Power Wide area technologies - NBIoT, LTEM1, LoRa and BLE

Video Download

Week 2 Assignment 2

The due date for submitting this assignment has passed.

Due on 2021-08-18, 23:59 IST.

As per our records you have not submitted this assignment.

1) Which RFID/NFC standard is used in Libre Pro Sensor?

1 point

- Felica
 ISO/IEC 18000-3
 ISO/IEC 15693
 ISO/IEC 14443

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 ISO/IEC 15693

2) In RFID, what is the function of the inventory command

1 point

- To know which tags are near by
 To get the UUID of the targeted device
 To read the desired device data by using UUID
 All the above
 None the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 All the above

3) What are the different types of RFID/NFC protocol supported by TRF7970A?

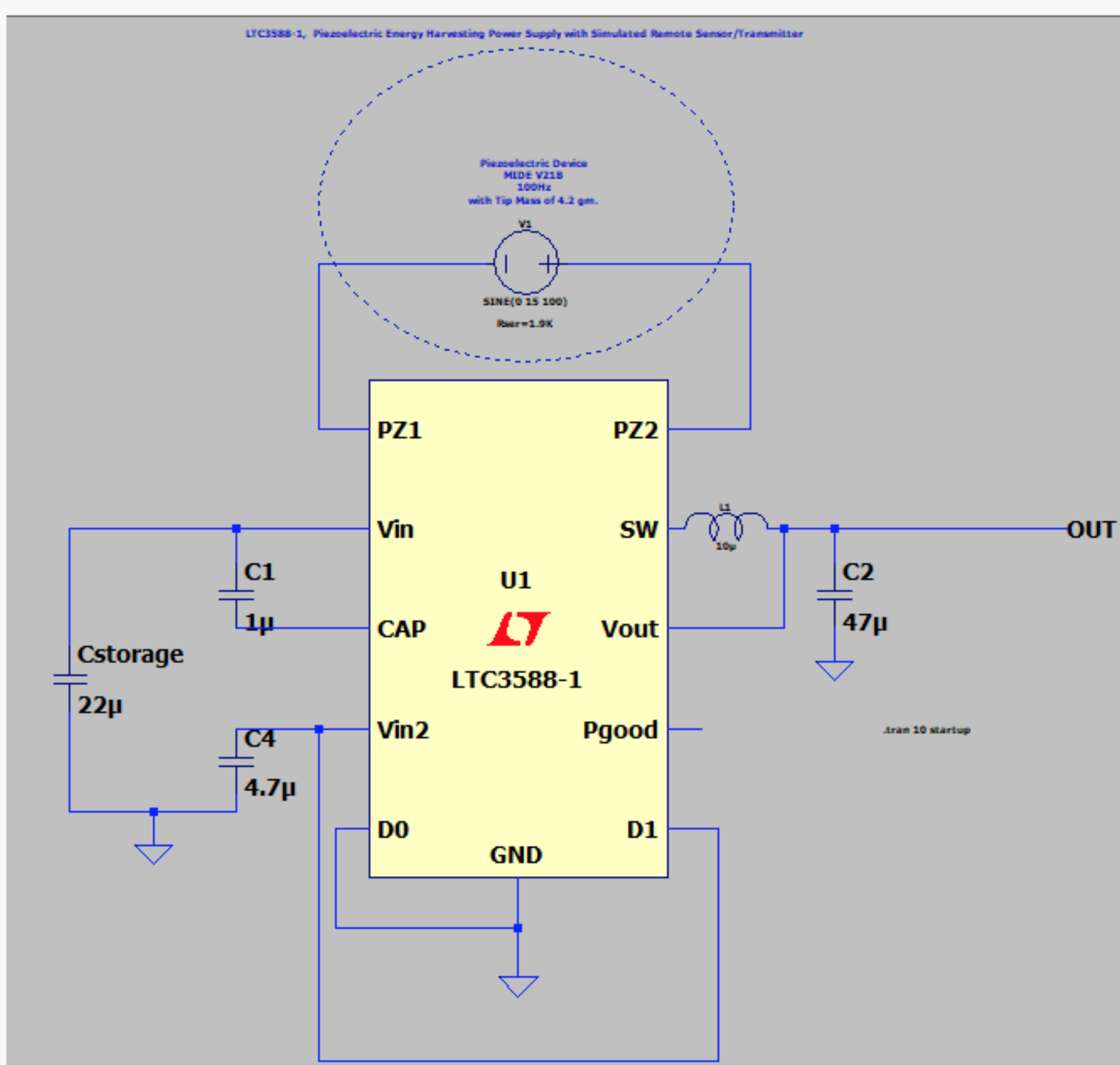
1 point

- Felica
 ISO/IEC 18000-3
 ISO/IEC 15693
 ISO/IEC 14443 A
 ISO/IEC 14443 B

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Felica
 ISO/IEC 18000-3
 ISO/IEC 15693
 ISO/IEC 14443 A
 ISO/IEC 14443 B

4)



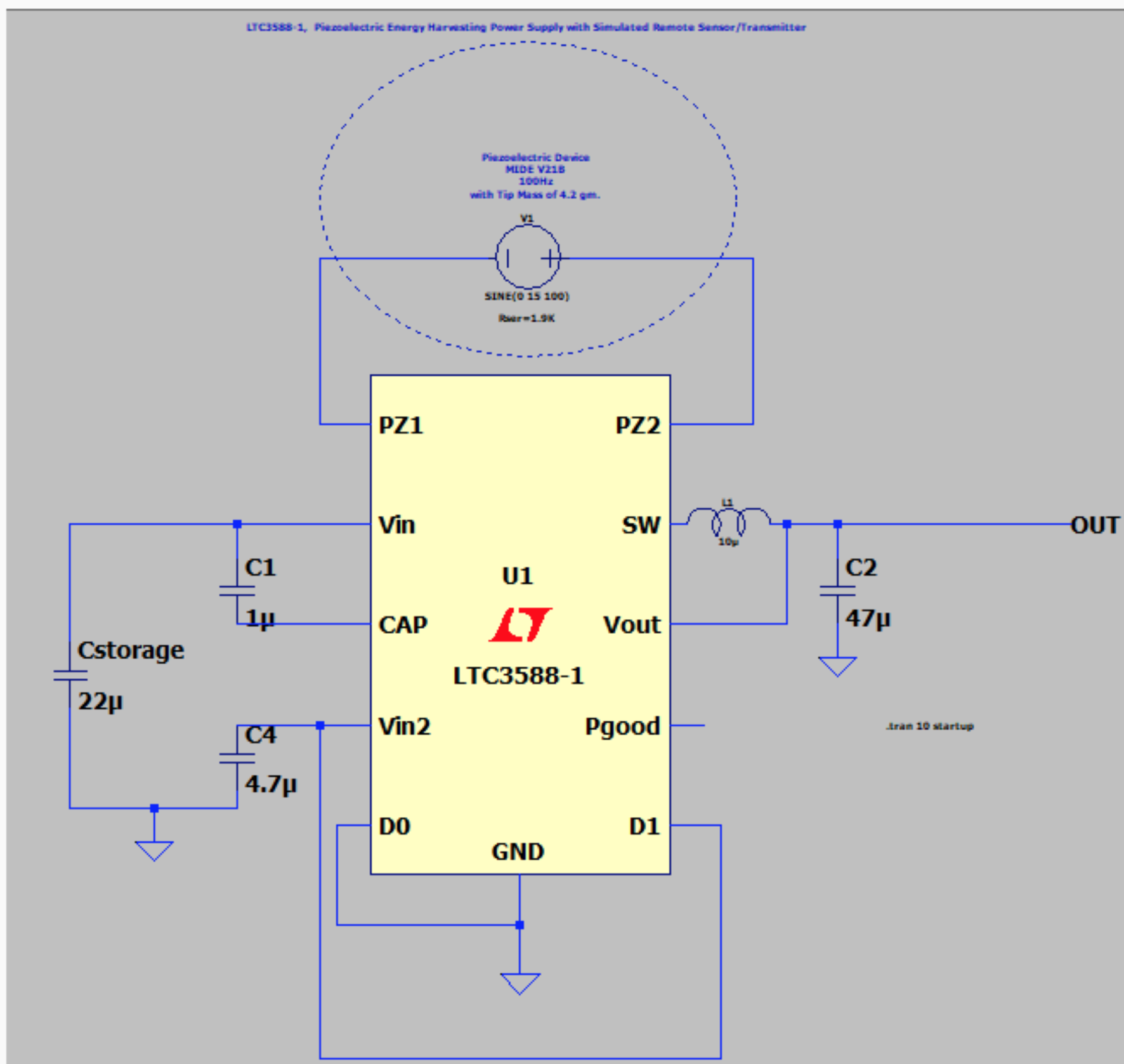
In the above mentioned circuit, if the amplitude is increased by 1.5 times and output capacitor is increased by 2 times. What will be the time taken to obtain a stable output of 3.3V?

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 (Type: Range) 51.00,53.00
 (Type: Range) 0.051,0.053

2 points

5)



In the above mentioned circuit, if the frequency is increased by 2 times and storage capacitor is increased by 2.5 times. What will be the time taken to obtain a stable output of 3.3V?

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 (Type: Range) 87.00,90.00
 (Type: Range) 0.087,0.09

2 points

6) From the datasheet of Tegu-12611-6, to harvest the maximum amount of energy, what is the required hot side temperature if cold side temperature is maintained at 30 deg.C

1 point

- 300 deg.C
 250 deg.C
 150 deg.C
 50 deg.C

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 300 deg.C

7) From the datasheet of Tegu-12611-6 for Th = 225 deg.C and Tc = 30 deg.C, the open circuit voltage obtained is

1 point

- 4 - 6 V
 7 - 8 V
 6 - 7 V
 3 - 4 V

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 6 - 7 V

8) From the datasheet of Tegu-12611-6 for Th = 200 deg.C and Tc = 50 deg.C, the output power obtained is

1 point

- 5 - 6 W
 3 - 4 W
 1 - 2 W
 6 - 7 W

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 5 - 6 W
 OR
 6 - 7 W