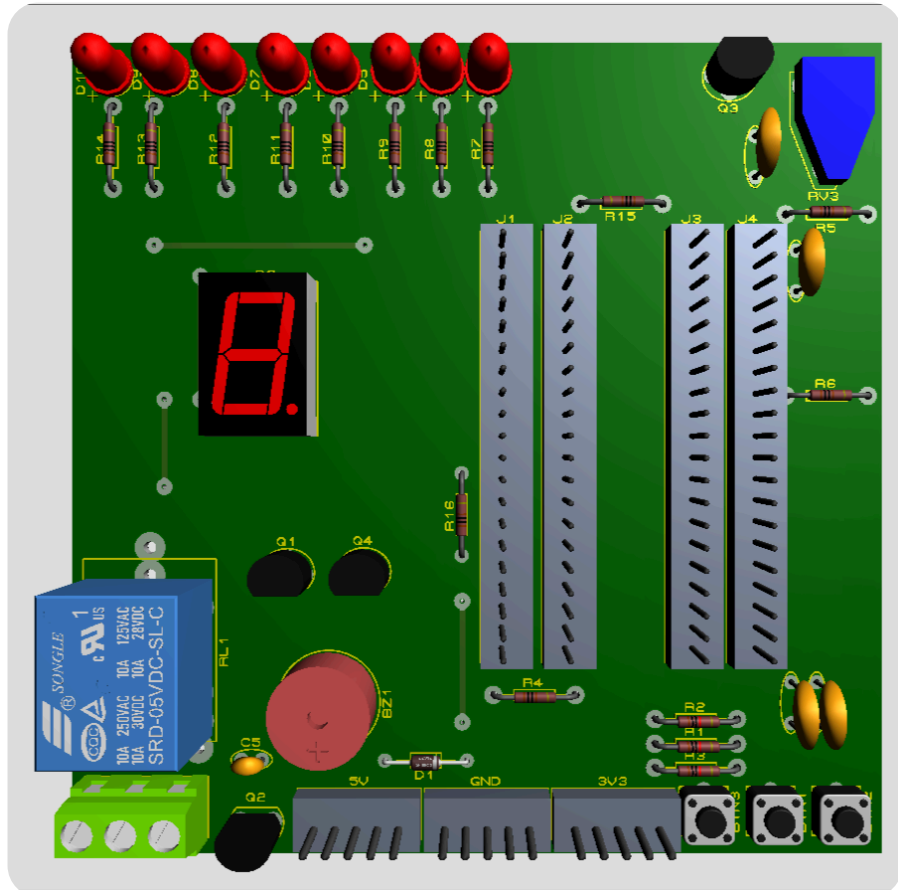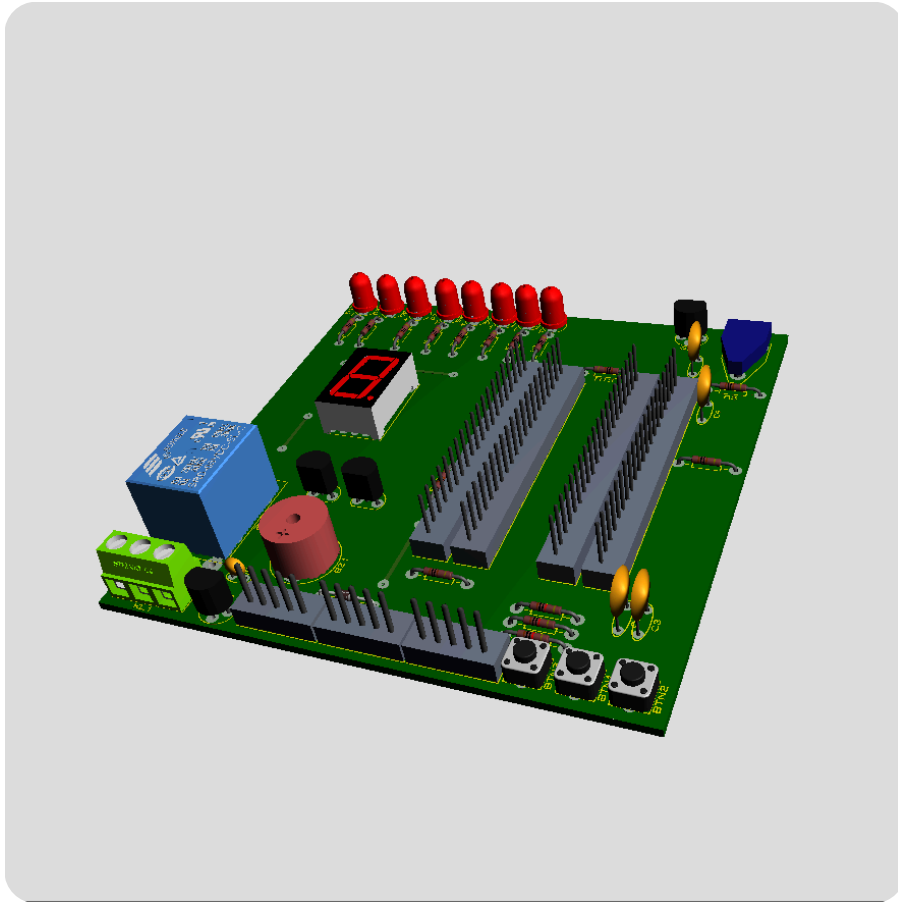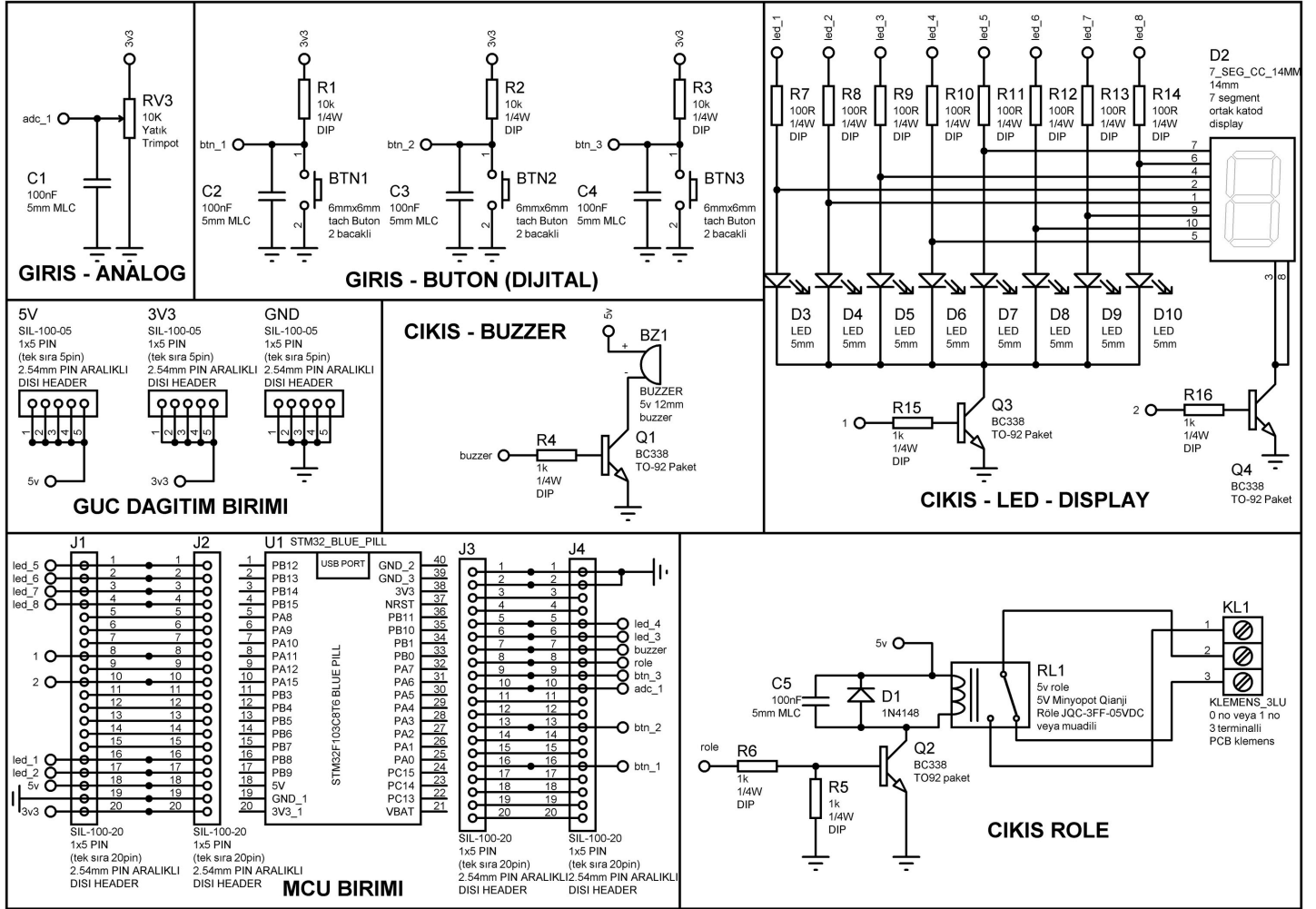# STM32 DENEY KARTI PROJE DOSYASI

Muhammed Bekdemir 435 11/B

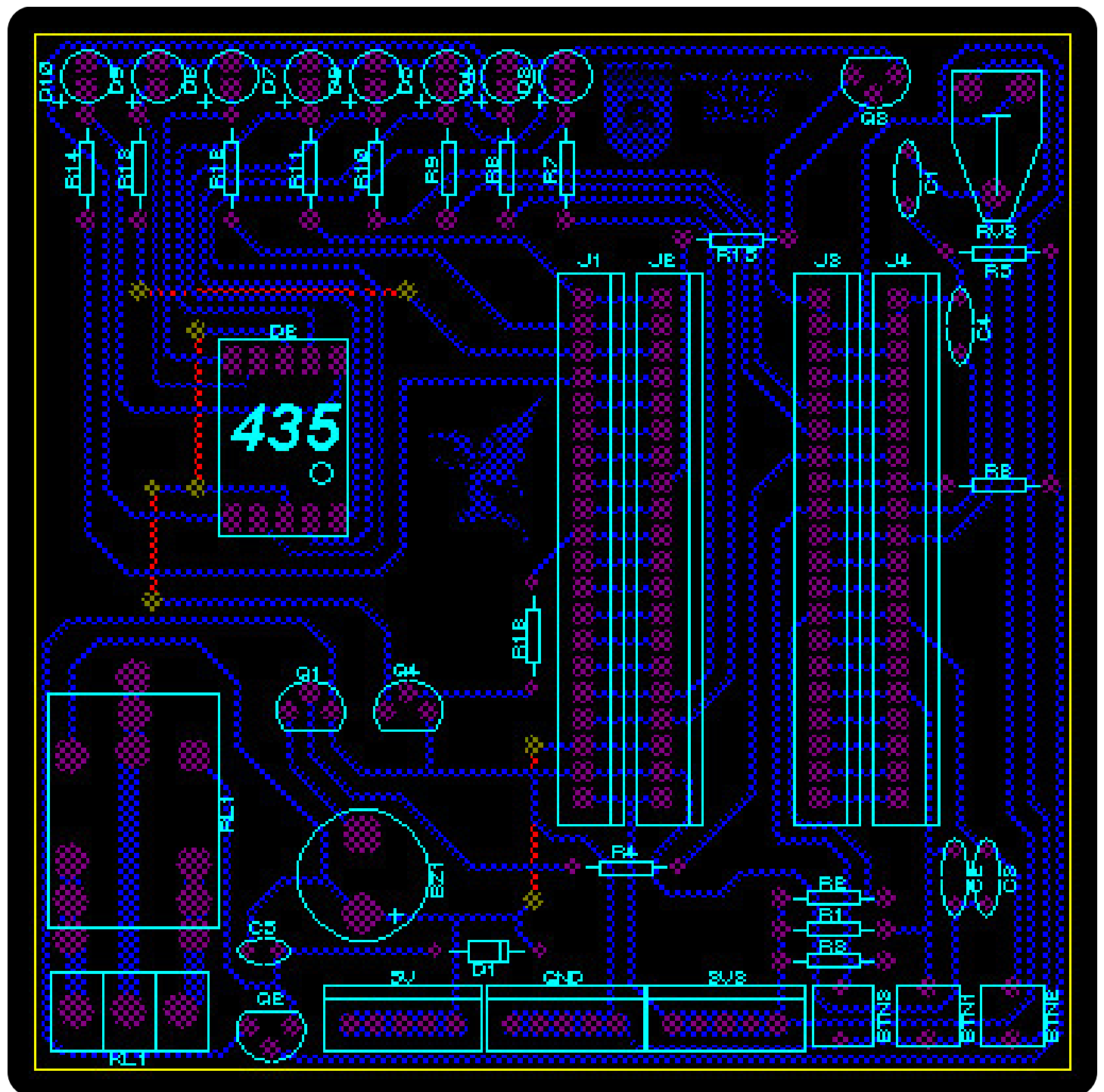# 1. Devrenin 3D Görüntüsü

2. ISIS Devre Şeması

GIRIS - ANALOG

adc_1

RV3
10K
Yatik
Trimpot

C1
100nF
5mm MLC

3v3

GIRIS - BUTON (DIJITAL)

3v3

R1
10k
1/4W
DIP

btn_1

C2
100nF
5mm MLC

BTN1
6mmx6mm
tach Buton
2 bacakli

3v3

R2
10k
1/4W
DIP

btn_2

C3
100nF
5mm MLC

BTN2
6mmx6mm
tach Buton
2 bacakli

3v3

R3
10k
1/4W
DIP

btn_3

C4
100nF
5mm MLC

BTN3
6mmx6mm
tach Buton
2 bacakli

GUC DAGITIM BIRIMI

5V
SIL-100-05
1x5 PIN
(tek sıra 5pin)
2.54mm PIN ARALIKLI
DISI HEADER

5v

3V3
SIL-100-05
1x5 PIN
(tek sıra 5pin)
2.54mm PIN ARALIKLI
DISI HEADER

3v3

GND
SIL-100-05
1x5 PIN
(tek sıra 5pin)
2.54mm PIN ARALIKLI
DISI HEADER

CIKIS - BUZZER

5v

BZ1

BUZZER
5v 12mm
buzzer

buzzer

R4
1k
1/4W
DIP

Q1
BC338
TO-92 Paket

CIKIS - LED - DISPLAY

led_1 led_2 led_3 led_4 led_5 led_6 led_7 led_8

R7   R8   R9   R10   R11   R12   R13   R14
100R   100R   100R   100R   100R   100R   100R   100R
1/4W   1/4W   1/4W   1/4W   1/4W   1/4W   1/4W   1/4W
DIP   DIP   DIP   DIP   DIP   DIP   DIP   DIP

D2
7_SEG_CC_14MM
14mm
7 segment
ortak katod
display

7
6
4
2
1
9
10
5

D3   D4   D5   D6   D7   D8   D9   D10
LED   LED   LED   LED   LED   LED   LED   LED
5mm   5mm   5mm   5mm   5mm   5mm   5mm   5mm

R15
1k
1/4W
DIP

Q3
BC338
TO-92 Paket

R16
1k
1/4W
DIP

Q4
BC338
TO-92 Paket

MCU BIRIMI

J1
led_5
led_6
led_7
led_8

1
2

led_1
led_2
5v
3v3

SIL-100-20
1x5 PIN
(tek sıra 20pin)
2.54mm PIN ARALIKLI
DISI HEADER

J2
SIL-100-20
1x5 PIN
(tek sıra 20pin)
2.54mm PIN ARALIKLI
DISI HEADER

U1 STM32_BLUE_PILL

USB PORT

1 PB12   GND_2 40
2 PB13   GND_3 39
3 PB14   3V3   38
4 PB15   NRST   37
5 PA8   PB11   36
6 PA9   PB10   35
7 PA10   PB1   34
8 PA11   PB0   33
9 PA12   PA7   32
10 PA15   PA6   31
11 PB3   PA5   30
12 PB4   PA4   29
13 PB5   PA3   28
14 PB6   PA2   27
15 PB7   PA1   26
16 PB8   PA0   25
17 PB9   PC15   24
18 5V   PC14   23
19 GND_1   PC13   22
20 3V3_1   VBAT   21

STM32F103C8T6 BLUE PILL

J3
SIL-100-20
1x5 PIN
(tek sıra 20pin)
2.54mm PIN ARALIKLI
DISI HEADER

J4
led_4
led_3
buzzer
role
btn_3
adc_1

btn_2

btn_1

SIL-100-20
1x5 PIN
(tek sıra 20pin)
2.54mm PIN ARALIKLI
DISI HEADER

CIKIS ROLE

5v

C5
100nF
5mm MLC

D1
1N4148

RL1
5v role
5V Minyopot Qianji
Röle JQC-3FF-05VDC
veya muadili

KL1
1
2
3
KLEMENS_3LU
0 no veya 1 no
3 terminalli
PCB klemens

role

R6
1k
1/4W
DIP

R5
1k
1/4W
DIP

Q2
BC338
TO92 paket

3. ARES PCB Tasarımı

Bill Of Materials for STM32 Deney Kartı

Design Title   STM32 Deney Kartı
Author
Document Number
Revision
Design Created   20 Aralık 2024 Cuma
Design Last Modified 20 Aralık 2024 Cuma
Total Parts In Design 50

0 Modules

Quantity	References	Value	Stock Code	Unit Cost
Sub-totals:				₺0,00

5 Capacitors

Quantity	References	Value	Stock Code	Unit Cost
5	C1-C5	100nF		
Sub-totals:				₺0,00

16 Resistors

Quantity	References	Value	Stock Code	Unit Cost
3	R1-R3	10k		
5	R4-R6,R15-R16	1k		
8	R7-R14	100R		
Sub-totals:				₺0,00

1 Integrated Circuits

Quantity	References	Value	Stock Code	Unit Cost
1	U1	STM32_BLUE_PILL		
Sub-totals:				₺0,00

4 Transistors

Quantity	References	Value	Stock Code	Unit Cost
4	Q1-Q4	BC338		
Sub-totals:				₺0,00

10 Diodes

Quantity	References	Value	Stock Code	Unit Cost
1	D1	1N4148		
1	D2	7_SEG_CC_14MM		
8	D3-D10	LED		
Sub-totals:				₺0,00

14 Miscellaneous

Quantity	References	Value	Stock Code	Unit Cost
3	3V3,5V,GND	SIL-100-05		
3	BTN1-BTN3			
1	BZ1	BUZZER		
4	J1-J4	SIL-100-20		
1	KL1	KLEMENS_3LU		
1	RL1	5v role		
1	RV3	10K	Digikey 3005P-103-ND	
Sub-totals:				₺0,00

Totals: ₺0,00