

Game, simulator, gift - development of logical thinking.

The game is designed to develop logical thinking in children, and can also be used as a Kit - as a board for learning programming in the C language and working with microcontrollers from Microchip Corporation.

The game can be a gift for a child to learn logical thinking, and a gift for an engineer, developer, electronics engineer, programmer on the desktop for minutes of rest and training logical thinking.

The game is a touch panel with light indication of the status and operating mode. The game can be controlled directly from the panel by touching the touch buttons or using the serial port of the computer with a simple command system.

Functional Diagram.SchDoc

Functional Diagram

Assembly.SchDoc

Assembly

Additional Documents.SchDoc

Additional documents

Table Of Contents.SchDoc

Table Of Contents

ProjName - Назва проекту. Project name.

ProjVersion - Помочна версія проекту. The current version of the project.

BoaName - Скорочена назва друкованої плати. Shortened the name of the printed board.

BoaVersion - Помочна версія друкованої плати. The current version of the printed board.

Checked - Ім'я та прізвище перевірюючого проекту. The first and last name of the inspection project.

Designer - Дизайнер проекту друкованої плати. Designer of the PCB project.

Project - Код проекту НЕЗМІНЮВАТИ! The project code is not changed!

ПРОЕКТУВАЛЬНІ МІРКУВАННЯ DESIGN CONSIDERATIONS

Зразки для копіювання.
Samples to copy.

ПРИМІТКА ДИЗАЙНУ:
Приклад тексту для нотаток з налагодження проекту.

DESIGN NOTE
Example text for debug notes.

ПРИМІТКА ДИЗАЙНУ:
Зразок тексту для інформаційних нотаток дизайну.

DESIGN NOTE
Example text for informational design notes.

ПРИМІТКА ДИЗАЙНУ:
Приклад тексту для критичних приміток щодо дизайну.

DESIGN NOTE
Example text for critical design notes.

ПРИМІТКА ДО МАКЕТУ ДП:
Приклад тексту для застережливих приміток щодо макету друкованої плати.

LAYOUT NOTE
Example text for cautionary design notes.

ПРИМІТКА ДИЗАЙНУ:
Приклад тексту для застережливих приміток щодо дизайну.

DESIGN NOTE
Example text for cautionary design notes.

ПРИМІТКА ДИЗАЙНУ:
Приклад тексту для нотаток з налагодження проекту.

DESIGN NOTE:
Example text for debug notes.

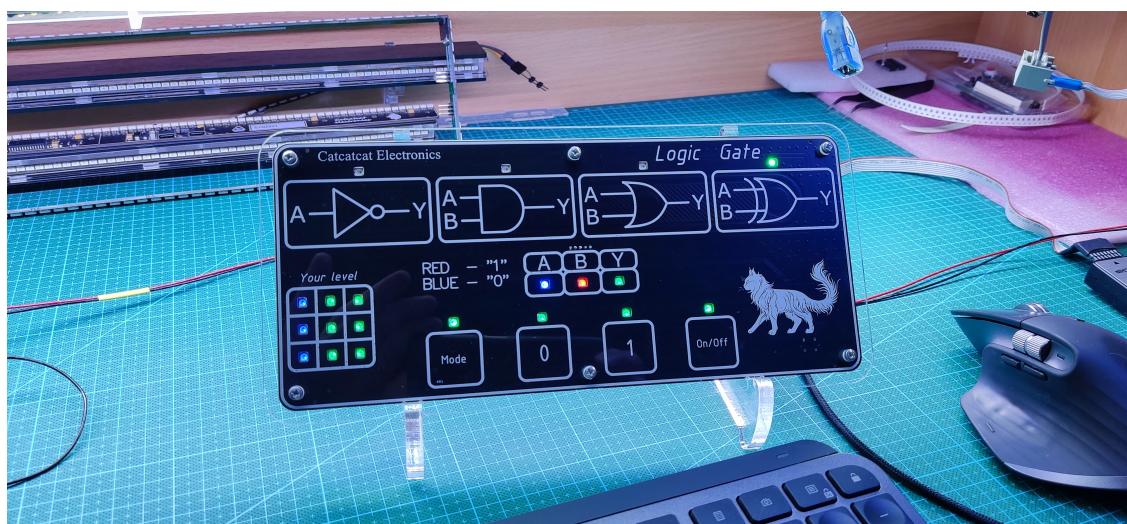
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DESIGN NOTE:
Example text for critical design notes.

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Приклад тексту для критичних вказівок щодо макету друкованої плати.

LAYOUT NOTE:
Example text for critical layout guidelines.

Project appearance



Designed for: Catcatcat Etsy

Project Title:	LogicGates4	Project ID:	2024-LogicGates4-00B1-PCB-R04
Project Version:	00B1	Lead Project:	Catcatcat
PCB Name:	PCB	Engineer SCH:	Catcatcat
PCB Revision:	Q4	Engineer PCB:	Catcatcat
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		Sheet:	1 of 10
		Size:	A3
File:	ProjectDescription.SchDoc	Note:	+380 50 575-98-63



Additional Documents

Links to additional project documents.

[Project Home Page](#)

[Customer requirement, technical assignment](#)

[Project architecture](#)

[Github Logic Gates](#)

[Text/link](#)

Note: Links to additional technical documents used in the project.

Designed for: Catcatcat Etsy	
Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04
Project Version: 00B1	Lead Project: Lead_Catcatcat <i>Development company</i>
PCB Name: PCB	Engineer SCH: SCH_Catcatcat <i>Catcatcat Electronics</i>
PCB Revision: 04	Engineer PCB: PCB_Catcatcat <i>Ukraine, Dnipro, Avenue Mira</i>
Sheet Title: Additional Documents	Inspection PRJ: Ins_Catcatcat <i>catcatcat.electronics@gmail.com</i>
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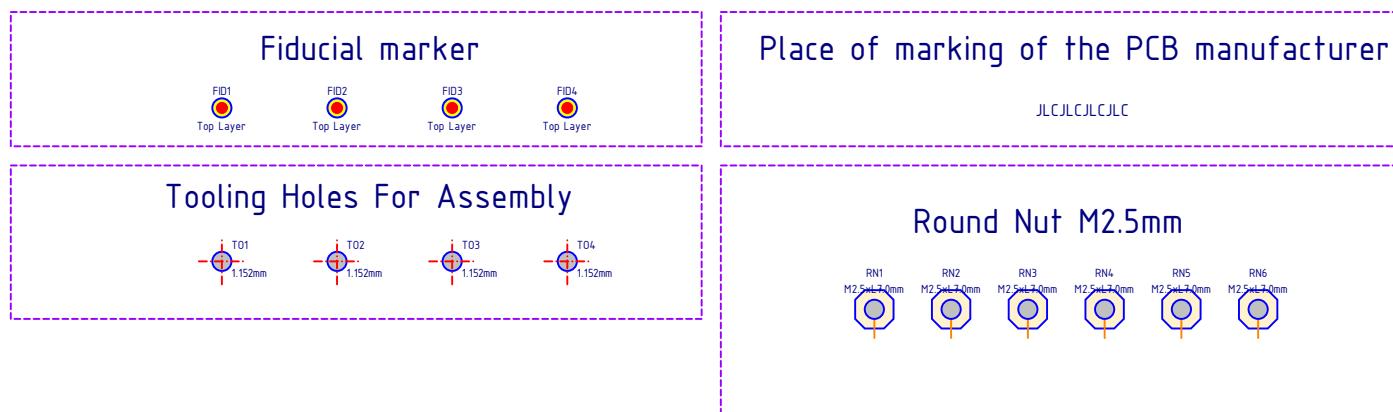


Assembly

Board Assembly Components

A

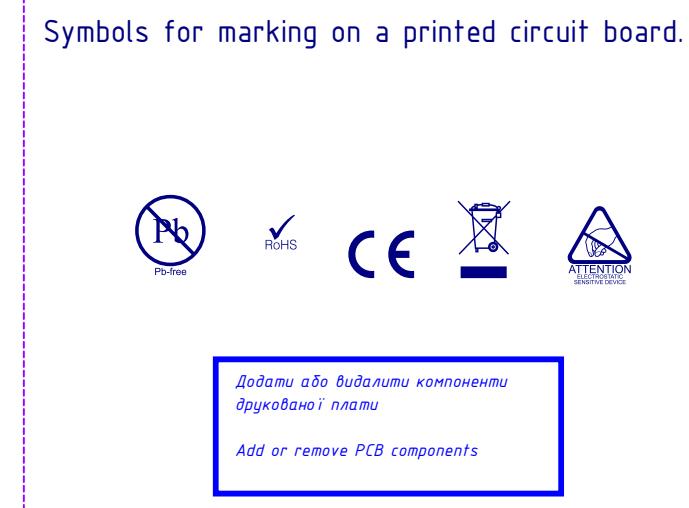
A



B

A

B



C

C

D

D

Designed for: **Catecat Etsy**

Project Title: LogicGates4-00B1-PCB-R04	Project ID: 2024-LogicGates4-00B1-PCB-R04	Development company
Project Version: 00B1	Lead Project: Catecat	Catecat Electronics
PCB Name: PCB	Engineer SCH: Catecat	<i>Ukraine, Dnipro, Avenue Mira</i>
PCB Revision: 04	Engineer PCB: Catecat	<i>catecat.electronics@gmail.com</i>
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Table Of Contents

List of project sheets.

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Sheet NO:	Sheet name	Notes
1	ProjectDescription.SchDoc	Brief description of the project and purpose of notes.
2	Additional Documents.SchDoc	Links to documents used and project development notes.
3	Assembly.SchDoc	Standard components used in the PCB assembly process.
4	Table Of Contents.SchDoc	Document with a brief description of the purpose of the sheets.
5	Functional Diagram.SchDoc	Project block diagram with common components.
6	Power	Power Management Module.
7	MCU	Microcontroller module.
8	Sound	Interactive tactile and audio feedback module.
9	Display	Interactive light feedback module.
10	Touch Sensors	Capacitive touch buttons.
11	****	****
12	****	****
13	****	****
14	****	****
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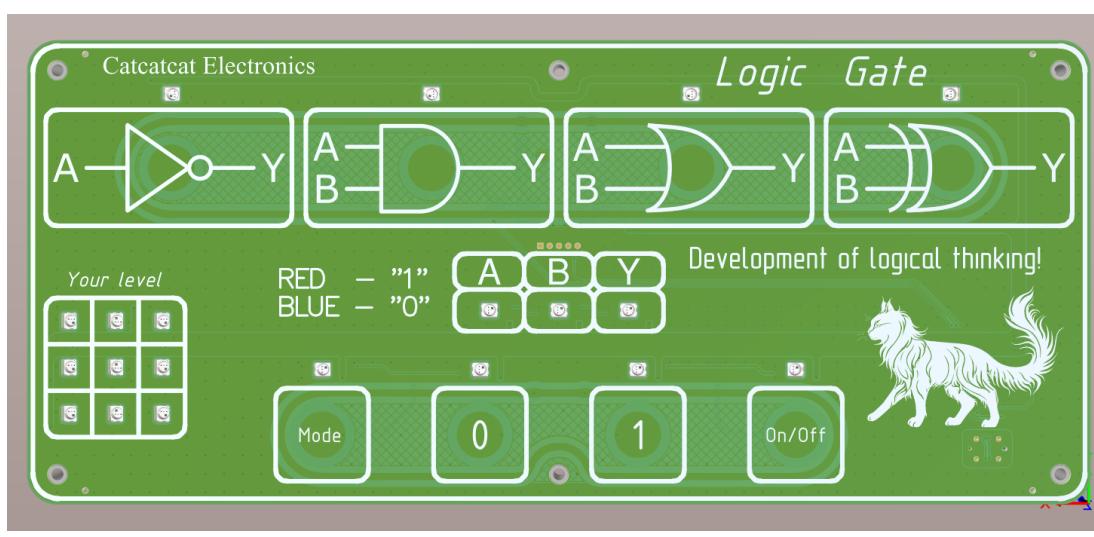
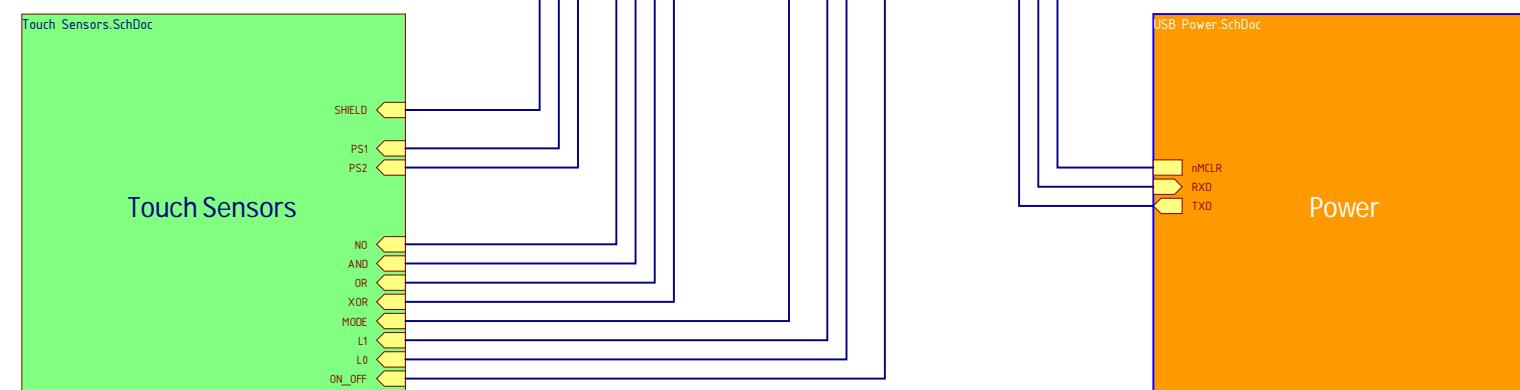
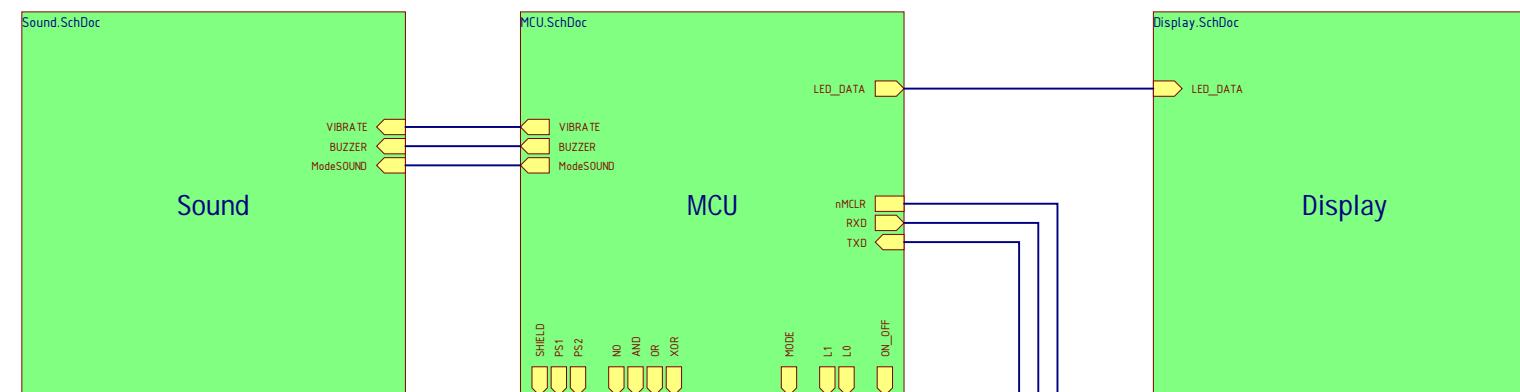
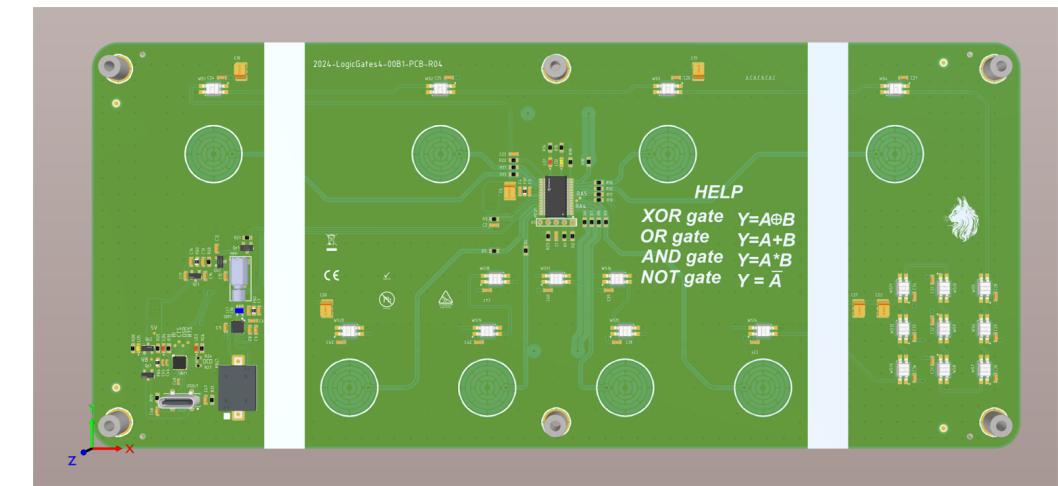
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Functional Diagram

Project flowchart.

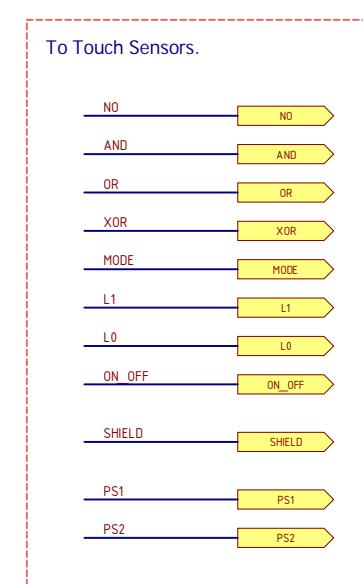
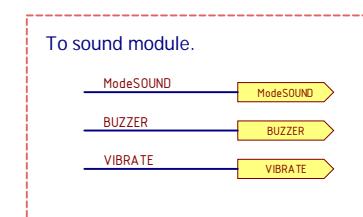
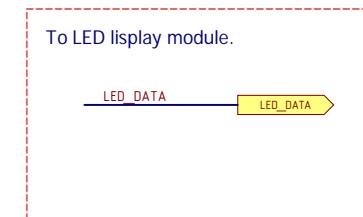
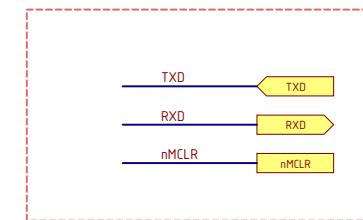
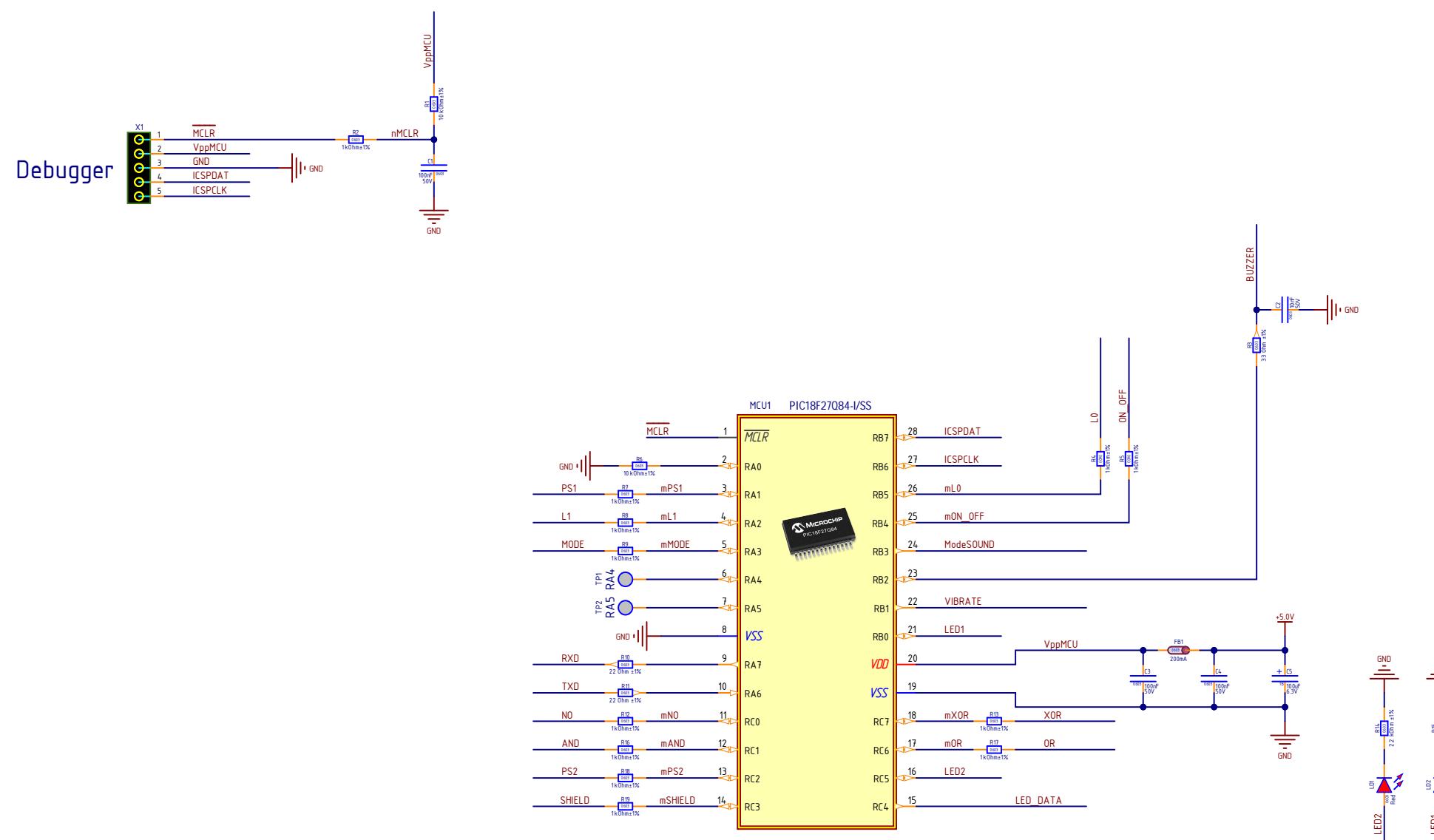


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MCU

Description



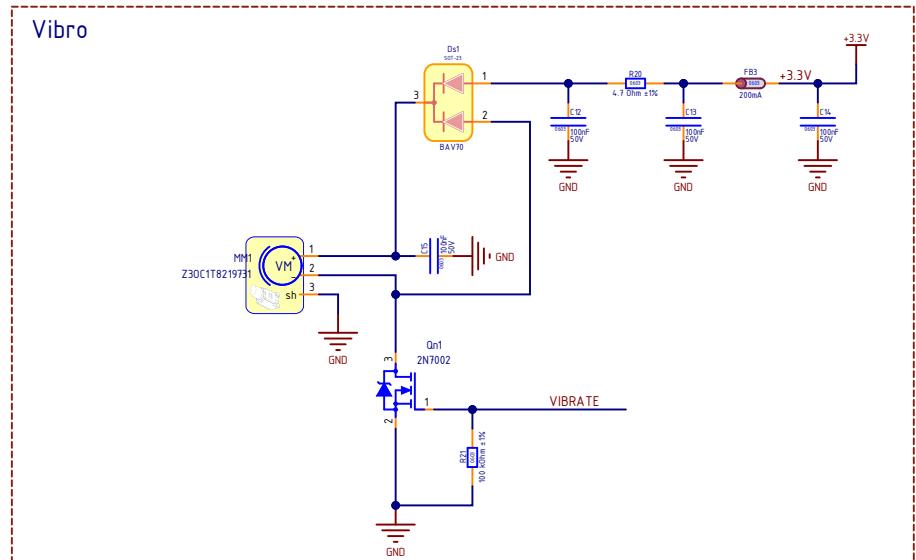
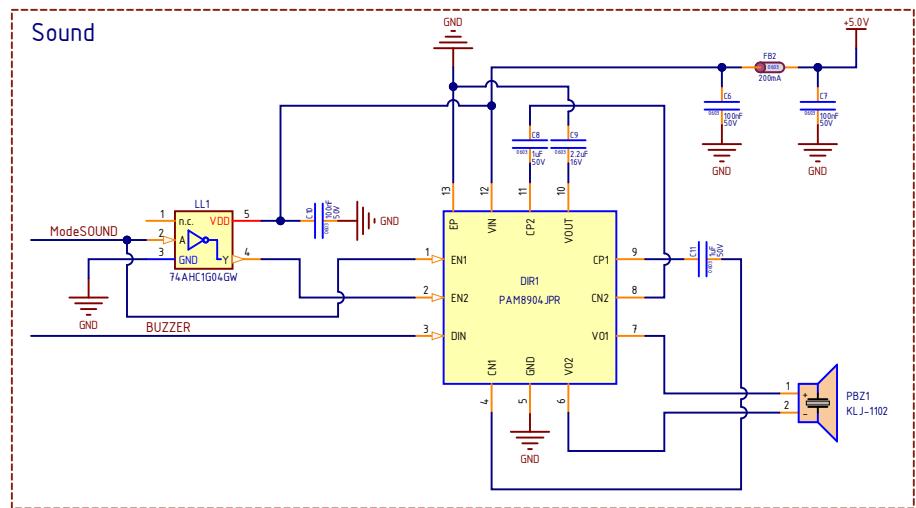
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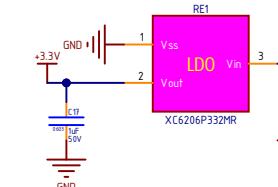


Sound

Interactive tactile and audio feedback module.



For vibration drive



Designed for: Catecat Etsy

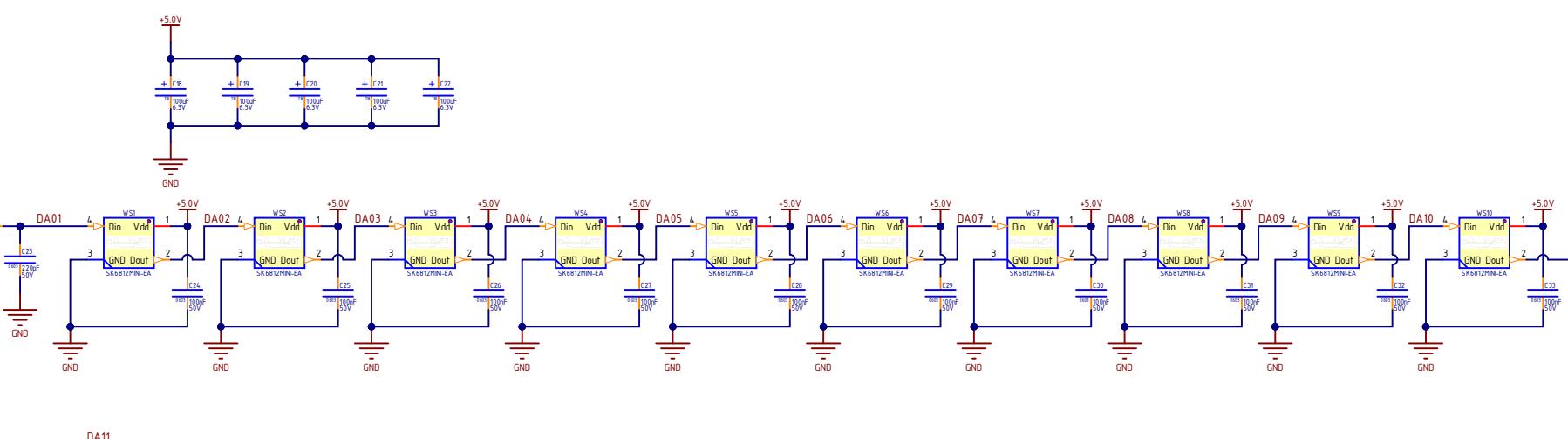
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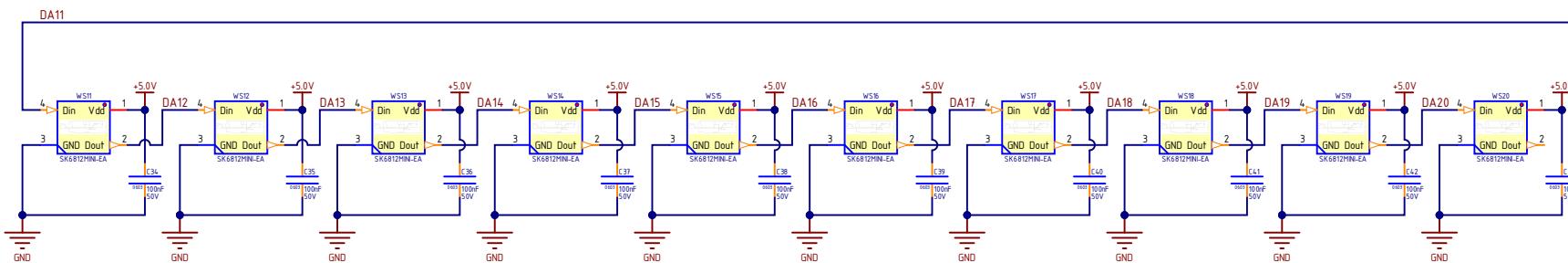
Display

Interactive lightfeedback module.

A



B



Designed for: Catecatat Etsy

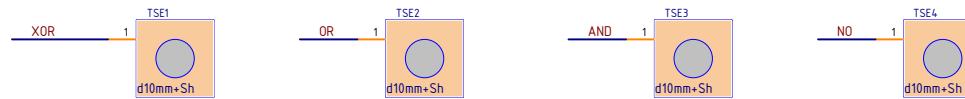
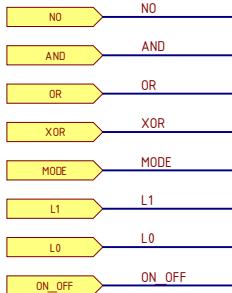
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Catecatat Electronics	
Ukraine, Dnipro, Avenue Mira	
catecatat.electronics@gmail.com	
+380 50 575-98-63	
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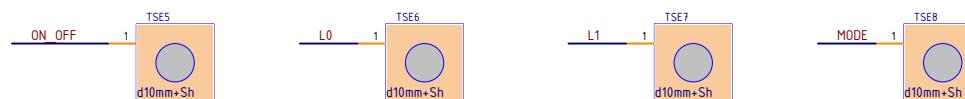
Touch Sensors

Capacitive touch buttons.

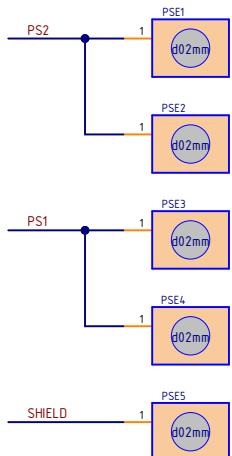
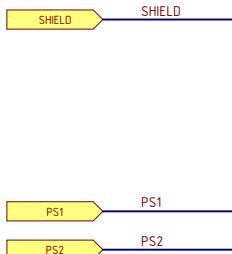
A



B



C



D

Designed for: **Catecatat Etsy**

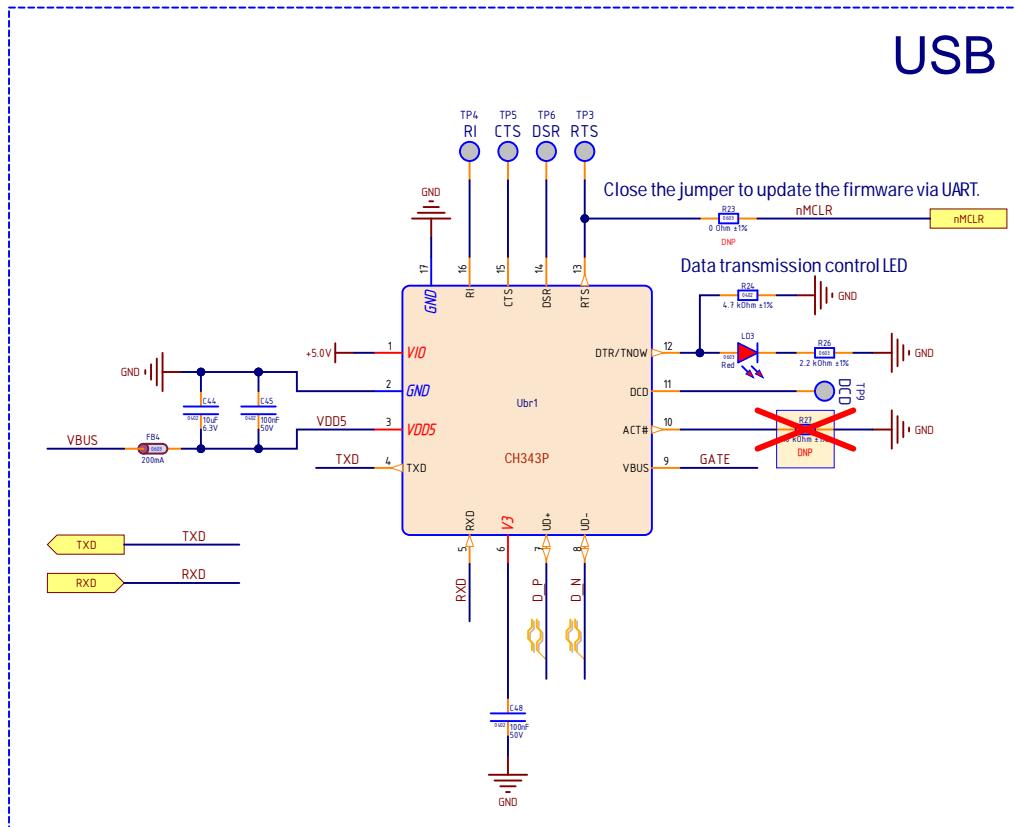
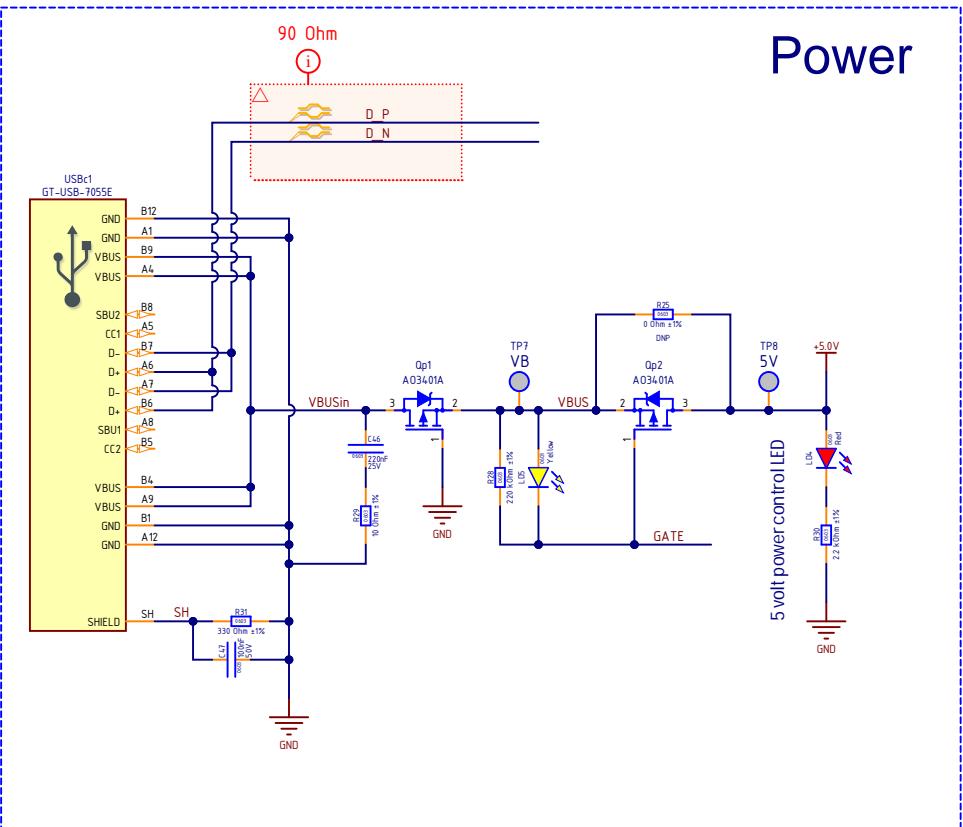
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Date: Fri, 31, 10, 2024 9:11:55 AM	Sheet 9 of 10	
File: Touch Sensors.SchDoc		



USB Power

Description

Power



Designed for:

Project Title:	LogicGates4	Project ID:	2024-LogicGates4-00B1-PCB-R04
Project Version:	00B1	Lead Project:	Lead Catcat
PCB Name:	PCB	Engineer SOC:	SCH Catcat
PCB Revision:	04	Engineer PCB:	PCB Catcat
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