

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

ПРИМІТКА ДИЗАЙНУ:
приклад тексту для нотаток з
налагодження проекту.

DESIGN NOTE:
Example text for debug notes.

Зразки для копіювання
Samples to copy.

ПРИМІТКА ДИЗАЙНУ
Приклад тексту для нотаток з
налагодження проекту.

DESIGN NOTE
Example text for debug notes.

ПРИМІТКА ДИЗАЙНУ
Приклад тексту для інформаційних
нотаток дизайну.

DESIGN NOTE
Example text for informational
design notes.

ПРИМІТКА ДИЗАЙНУ
Приклад тексту для критичних приміток
шодо дизайну.

DESIGN NOTE
Example text for critical design notes.

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

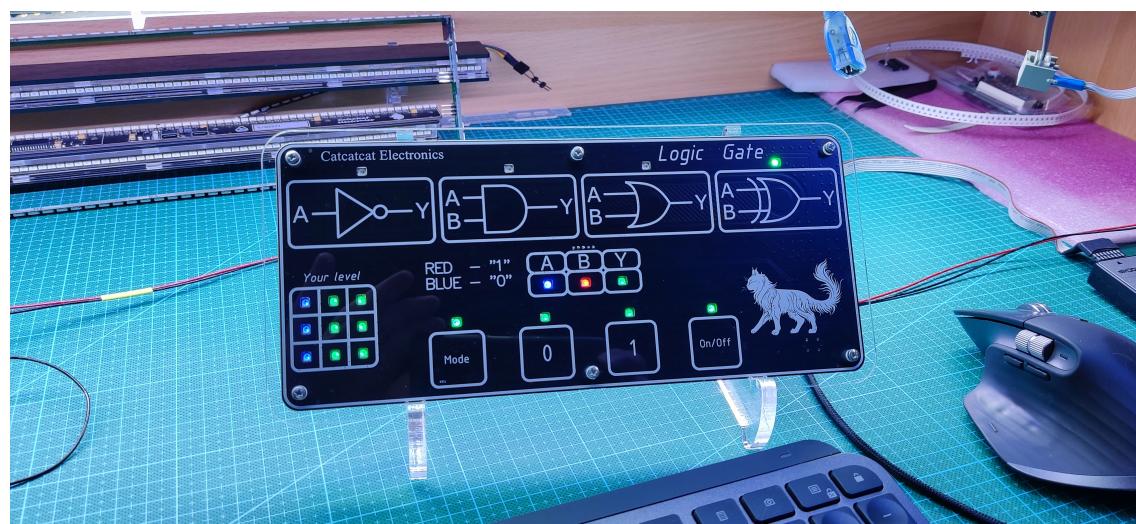
LAYOUT NOTE
Example text for cautionary
design notes.

Designed for: Catcatcat Etsy	
Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04
Project Version: 00B1	Lead Project: Lead_Catcatcat
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PCB Revision: 04	Engineer SCH: SCH_Catcatcat
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Assembly Variant: [No Variations]	Inspection PRJ: Ins_Catcatcat
Date: 04.10.2025	Time: 09:53:02
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	Size: A3
	+380 50 575-98-63
	Note: catcatcat.electronics@gmail.com



Project – 2024-LogicGates4-00B1-PCB-R04

Project appearance



Additional Documents

Links to additional project documents.

[Project Home Page](#)

[Customer requirement, technical assignment](#)

[Project architecture](#)

[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:	Catcatcat <i>Development company</i>
PCB Name:	PCB	Engineer SCH:	Catcatcat <i>Catcatcat Electronics</i>
PCB Revision:	Q4	Engineer PCB:	PCB-Catcatcat <i>Ukraine, Dnipro, Avenue Mira</i>
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		Time:	09:53:03
		Sheet:	2 of 10
		Size:	A3
File:	Additional Documents Sch Doc		



Assembly

Board Assembly Components

A

A

Fiducial marker



Place of marking of the PCB manufacturer

JLCJLCJLCJLC

Tooling Holes For Assembly



Round Nut M2.5mm



B

B

Symbols for marking on a printed circuit board.



RoHS



Добави або видаліти компоненти
друкованої плати

Add or remove PCB components

C

C

Designed for: Catecat Etsy

Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04	Development company <i>Catecat Electronics</i> Ukraine, Dnipro, Avenue Mira catecatelectronics@gmail.com +380 50 575-98-63 Note
Project Version: 00B1	Lead Project: Lead Catecat	
PCB Name: PCB	Engineer SCH: SCH Catecat	
PCB Revision: 04	Engineer PCB: PCB Catecat	
Sheet Title: Assembly	Inspection PR: Ins Catecat	
Assembly Variant: [No Variations]	Date: 04.10.2025 Time: 09:53:03	Sheet 3 of 10 Size: A4
File: Assembly.SchDoc		



Table Of Contents

List of project sheets.

TABLE OF CONTENTS

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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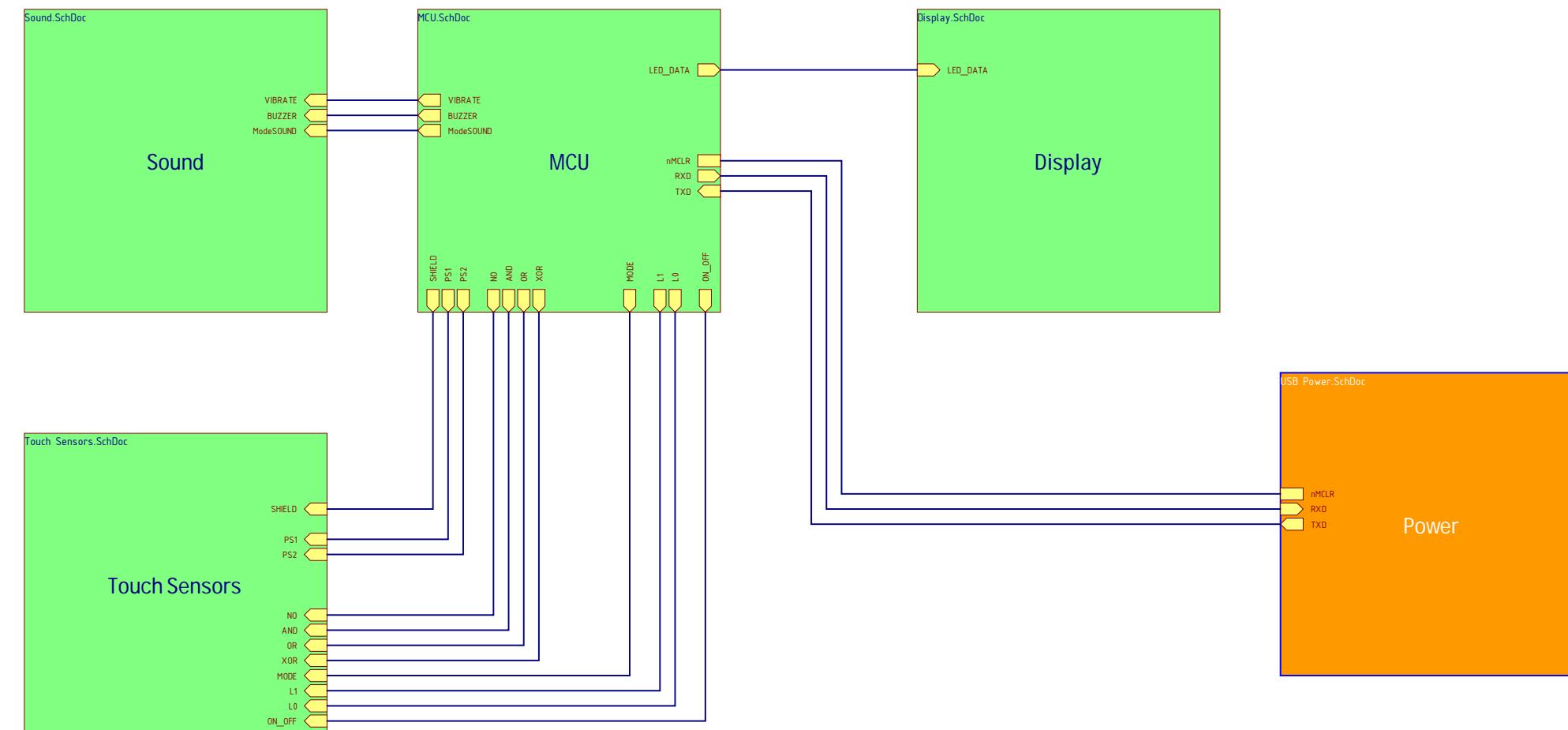
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Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04
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Date: 04.10.2025	Time: 09:53:03
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Functional Diagram

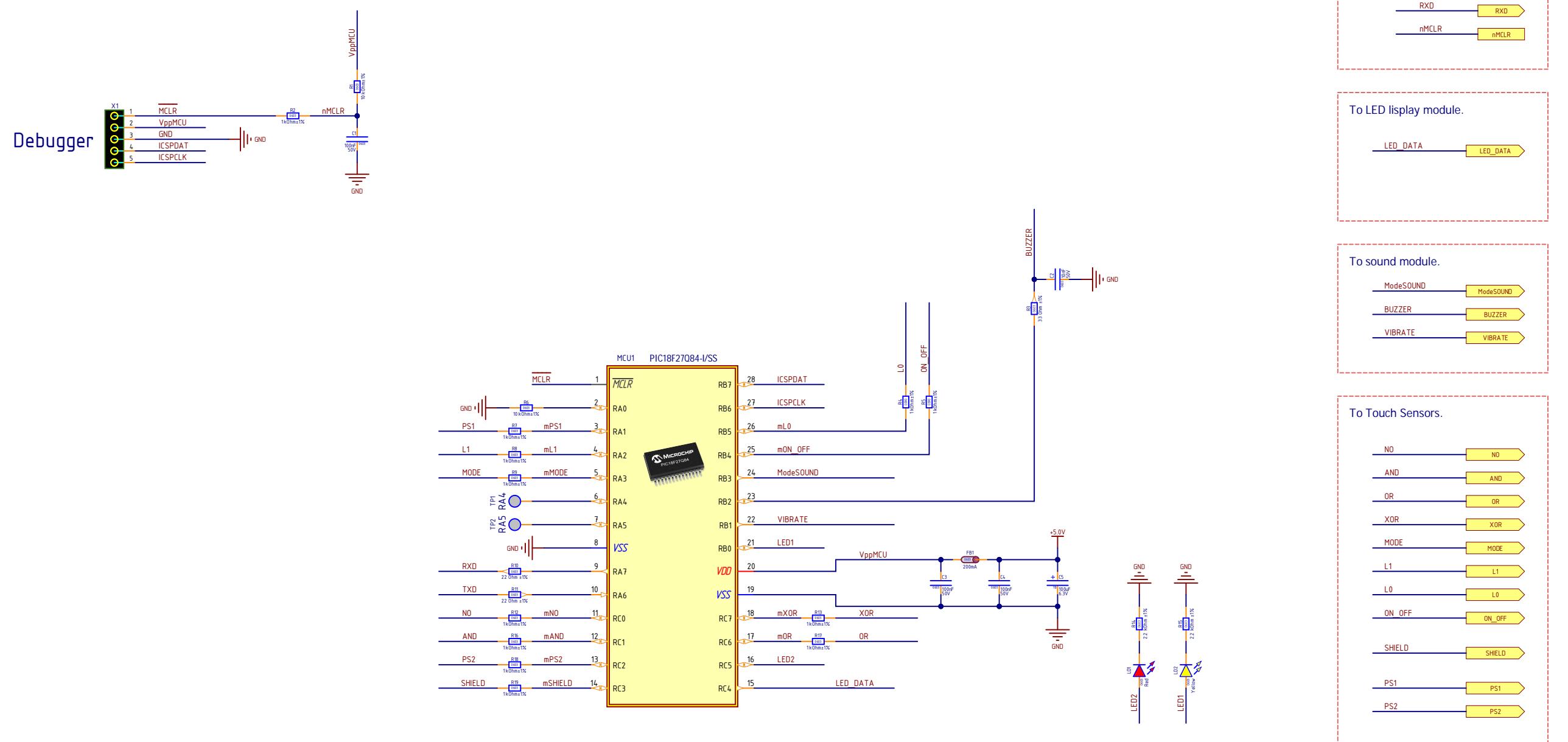
Project flowchart.



Designed for: Catcatcat Etsy	
Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04
Project Version: 00B1	Lead Project: Lead_Catcatcat
PCB Name: PCB	Development company: Catcatcat Electronics
PCB Revision: 04	Ukraine, Dnipro, Avenue Mira
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MCU

Description



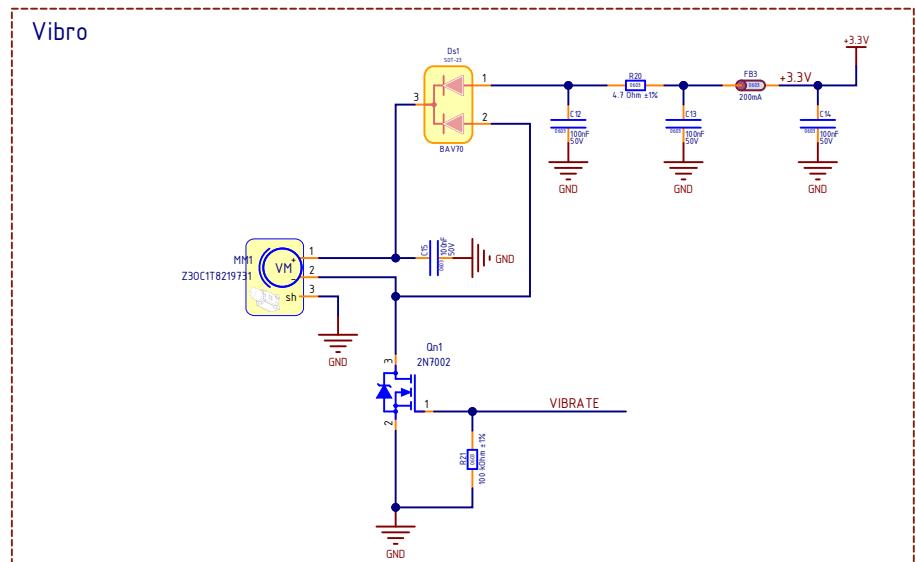
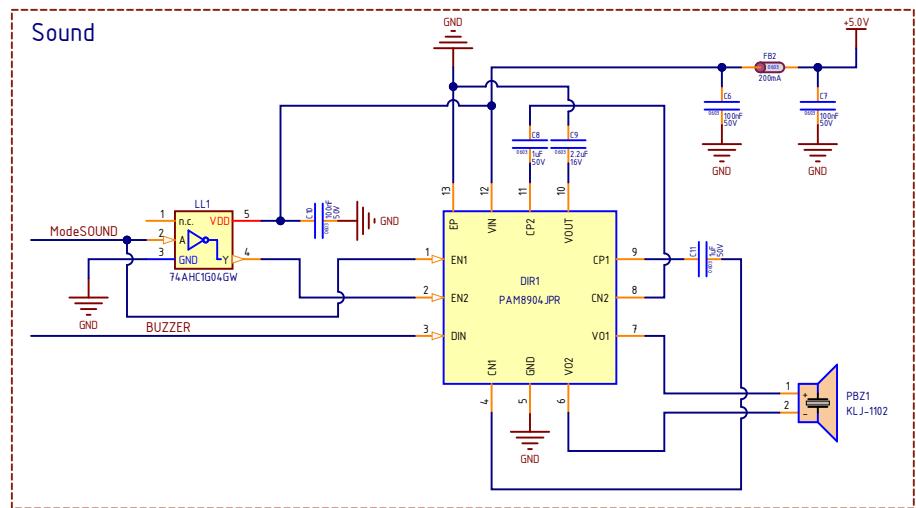
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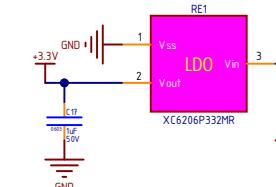


Sound

Interactive tactile and audio feedback module.



For vibration drive



Designed for: Catecat Etsy

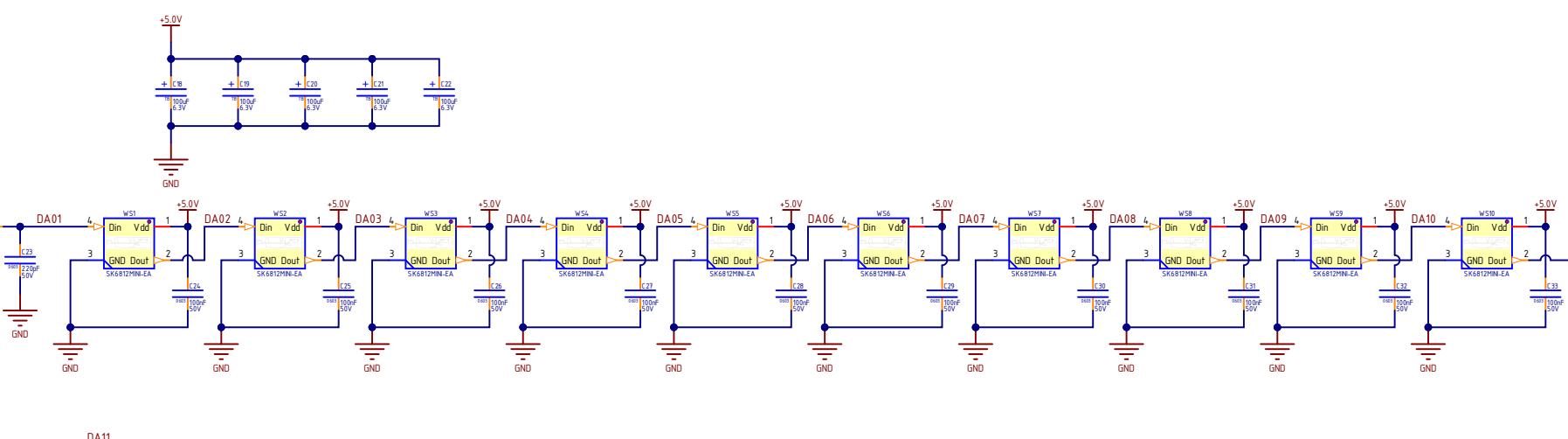
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PCB Revision: 04	Engineer PCB: Catecat	catecat@electronics@gmail.com
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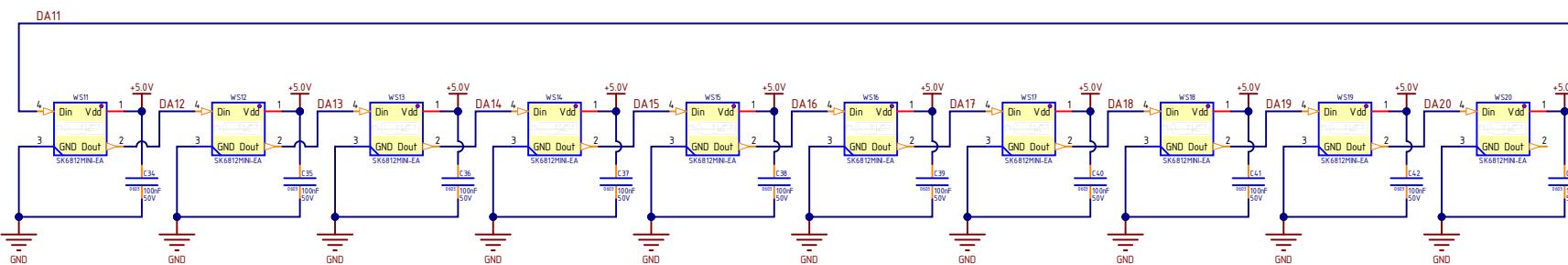
Display

Interactive lightfeedback module.

A



B



Designed for: **Catecatat Etsy**

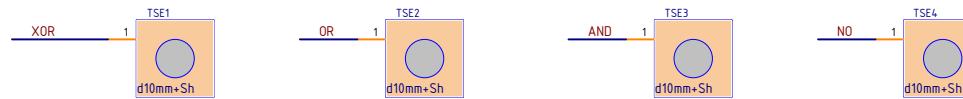
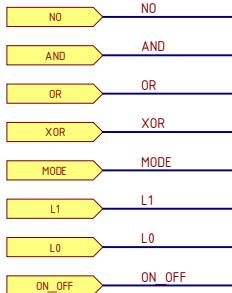
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Development company Catecatat Electronics Ukraine, Dnipro, Avenue Mira catecatatelectronics@gmail.com +380 50 575-98-63	
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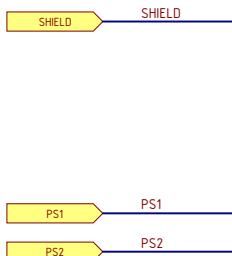
Touch Sensors

Capacitive touch buttons.

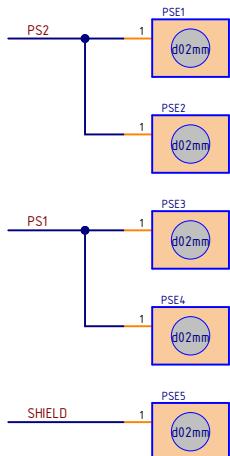
A



B



C



D

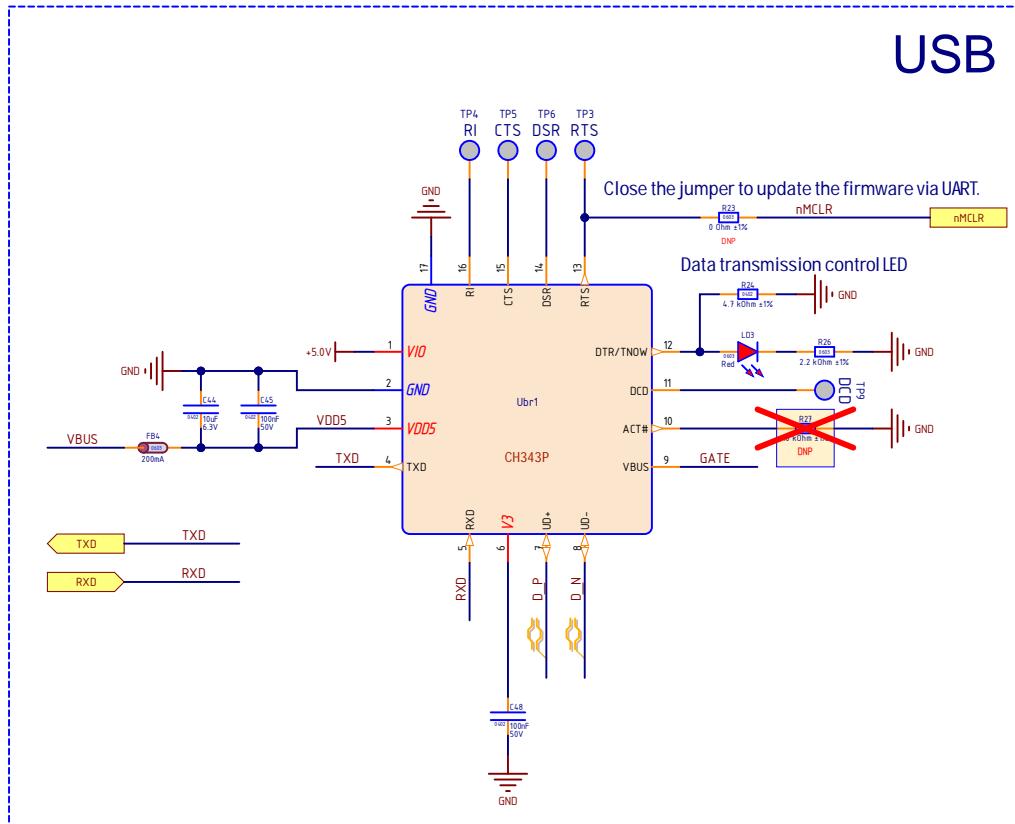
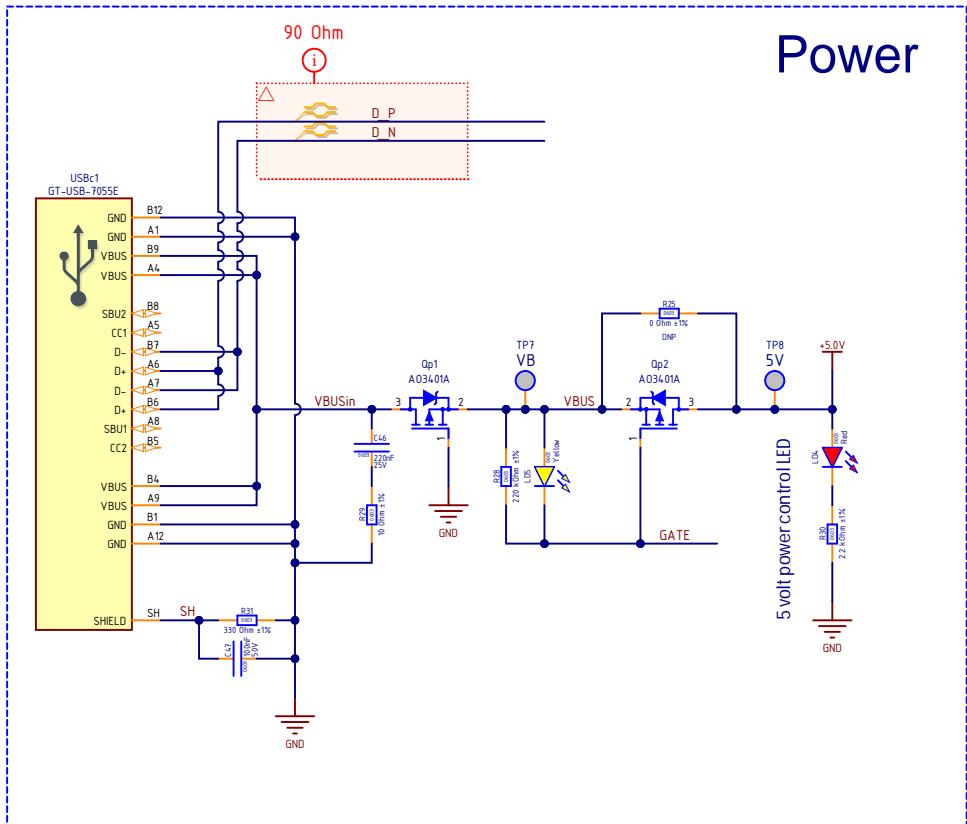
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Sheet:	9	of:	10
Size:	A4		



USB Power

Description



Designed for: Catecatat Etsy

Project Title: LogicGates4	Project ID: 2024-LogicGates4-00B1-PCB-R04	Development company: Catecatat Electronics
Project Version: 00B1	Lead Project: Lead Catecatat	Catecatat Electronics
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PCB Revision: 04	Engineer PCB: PCB_Catecatat	catecatat.electronics@gmail.com
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