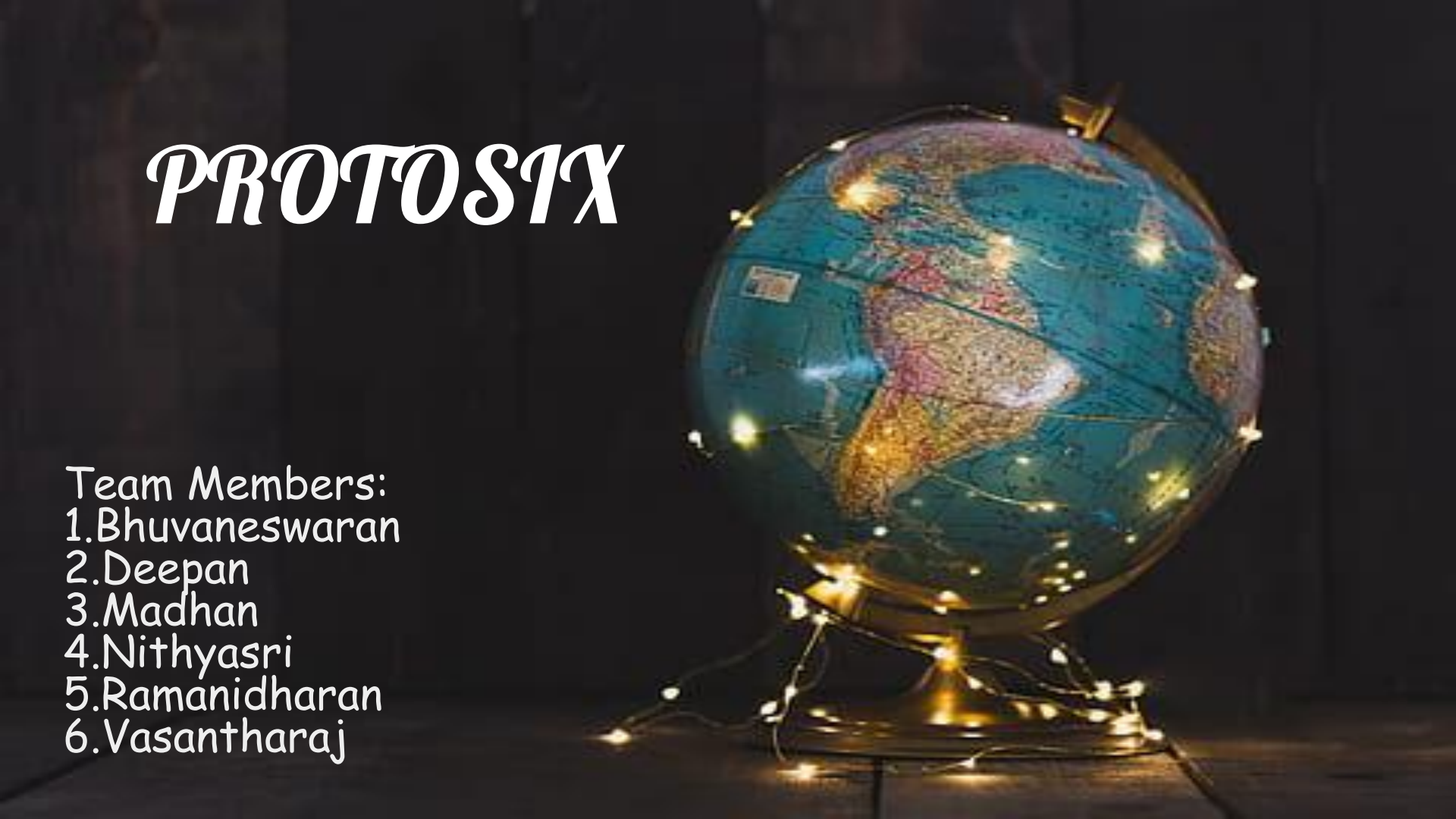
PROTOSIX



Team Members:
1.Bhuvaneswaran
2.Deepan
3.Madhan
4.Nithyasri
5.Ramanidharan
6.Vasantharaj

AGENDA

1. Our system: Scientific Calculator

2. System and its subsystem

3. Components

a) Motherboard
b) Input and Output Devices
c) Power Supply
d) Frame/ Cover

4.Conclusion

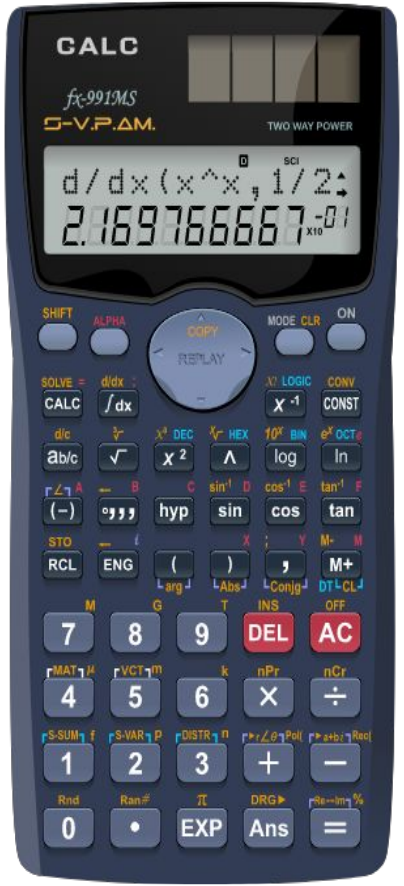
INTRODUCTION

A Scientific Calculator

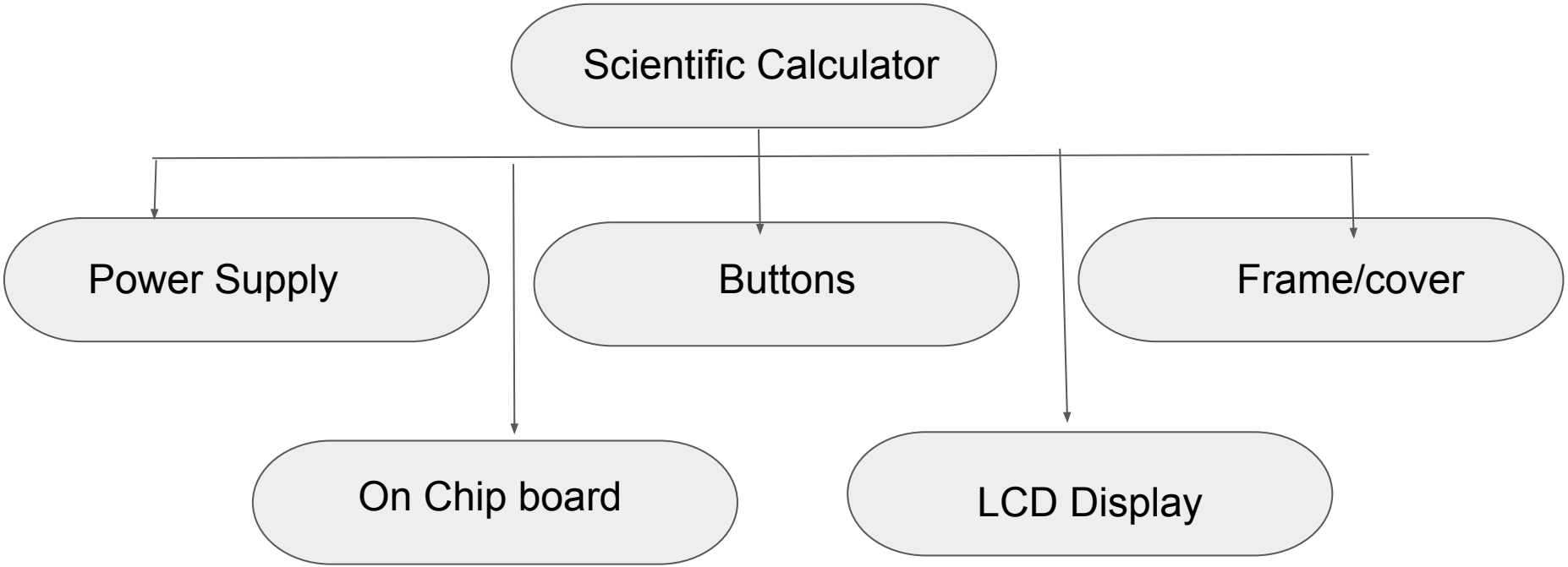
Model: CASIO fx-991MS

401 functions

LINK:
https://www.casio.com/intl/scientific-calculators/product.FX-991MS/

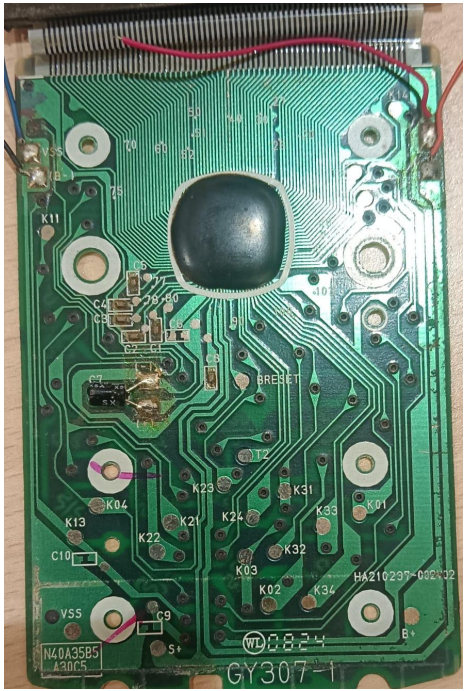


SYSTEM AND ITS SUBSYSTEM



Components (5)

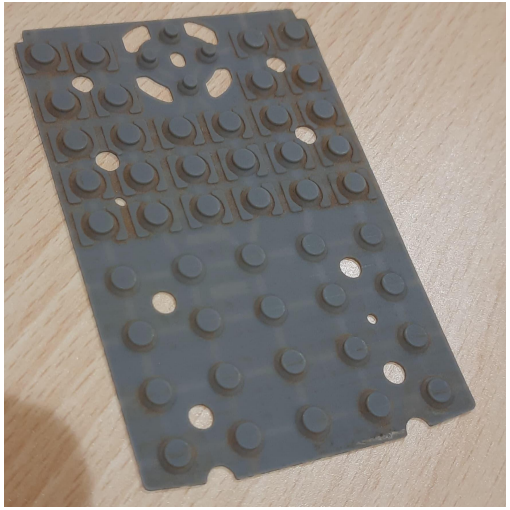
1. Motherboard
    - Main IC The core logic unit is under a COP (Chip on board).
    - The COB (Chip-On-Board) used in the Casio fx-991MS is a proprietary ASIC (Application-Specific Integrated Circuit) designed specifically for scientific calculations.

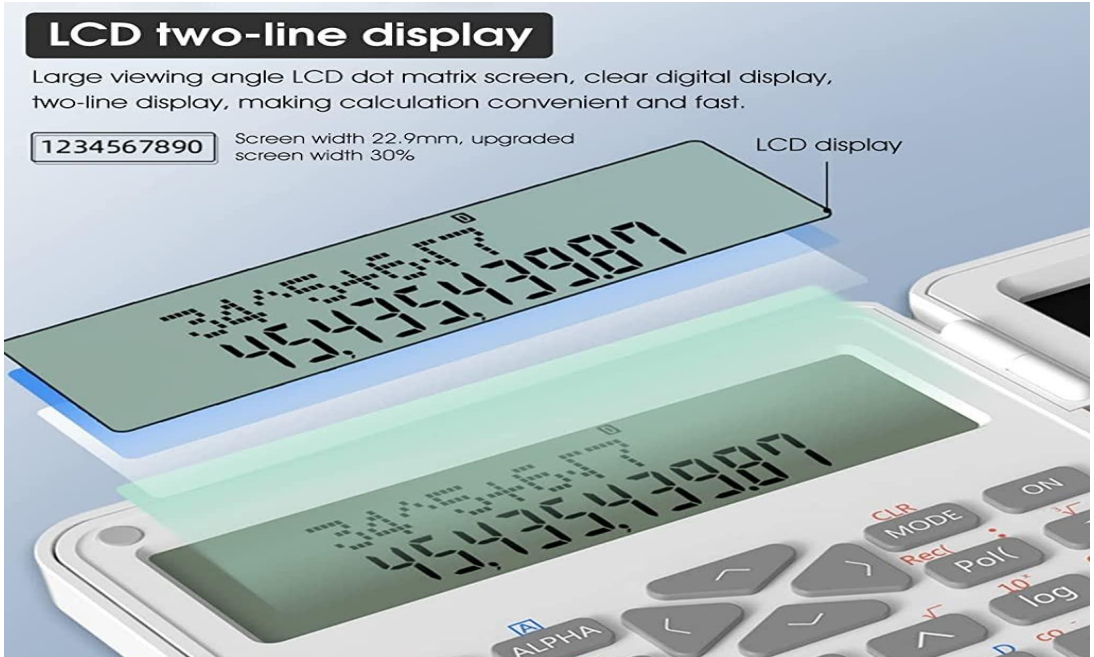


2.INPUT AND OUTPUT FUNCTIONS

a) Keypad (Buttons) - input
b) LCD (2 line display) - output

Method: S-V.P.A.M





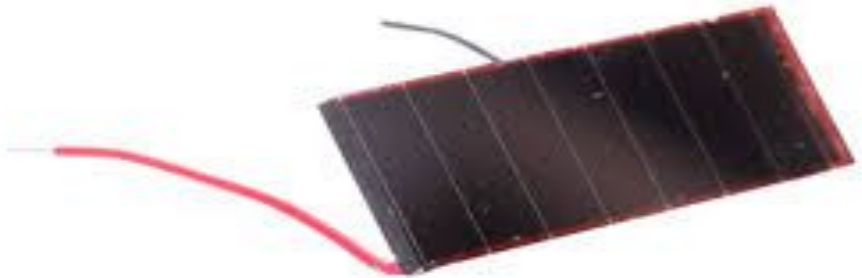
3.POWER SUPPLY

Dual power system:

Battery: LR44 button cell (1.5-3V)

Solar panel: Photovoltaic solar cell (1.5-2V)

Capacitor for stability (0.1-2ЧF)



Frame

- Made out of **ABS plastic** (Acrylonitrila butadiene styrene).
- The joints used are typically **snap-fit joints.**
- **Ribs** are given in the main frame of calculator for support, strength .

ATTRIBUTES

Wires and screws

CONCLUSION

In summary, the fx-991MS is an essential device that combines efficiency, accuracy, and ease of use in a compact and energy-efficient design, reinforcing its role as a trusted companion for mathematical problem-solving.

THANK YOU