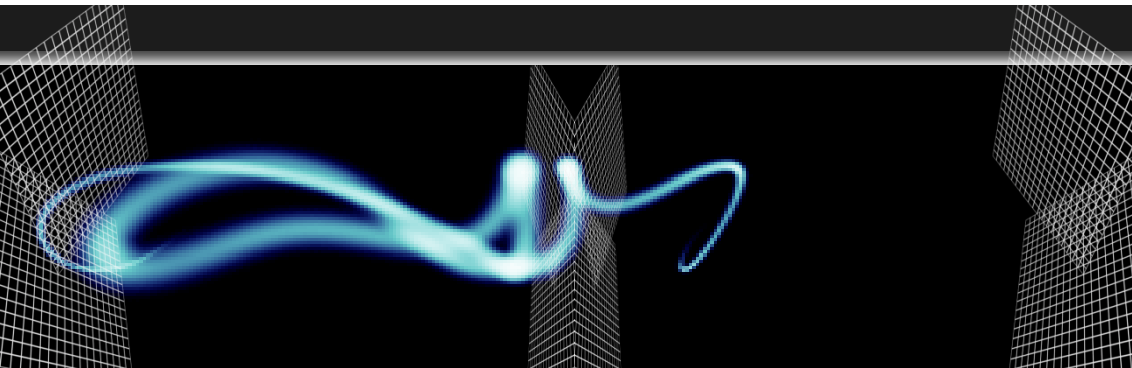




GWANAK  
PRECISION



# *Kwanak Precision Prelude*

2004-11656	서 호 원	Seo, Ho Won
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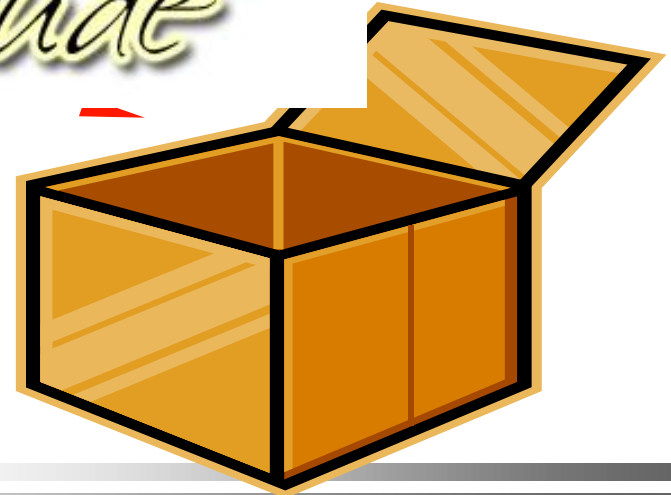
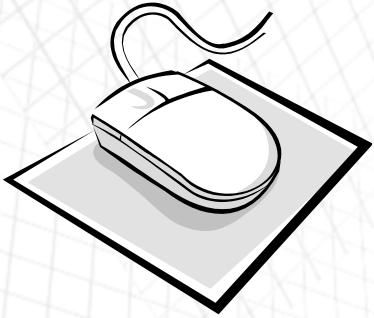
# Introduction



# What is PRELUDE?

## ❖ PRELUDE (전주곡, 서곡 序曲)

- Something serves as a preceding event or introduces what follows after it.
- Metaphor for the "Interface Device of the Next Generation"



## ❖ Hardware

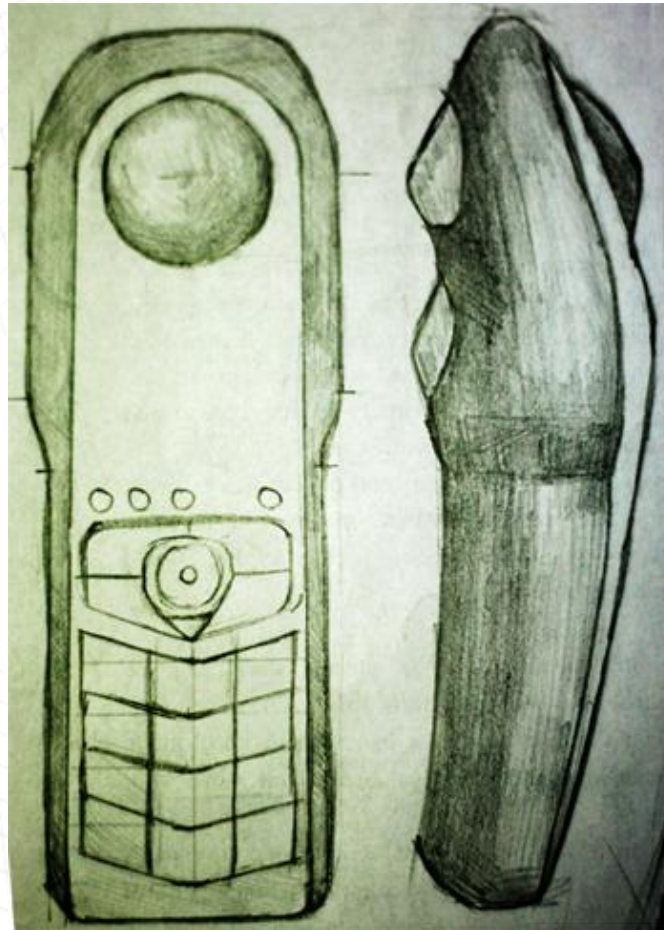
- Space for keyboard
  - Compact key arrangement is needed
- Robust Design
  - Various types of impact are expected

## ❖ Software

- Wireless Communication
  - Bluetooth Vs Infra Red
- Application System
  - Signal Processing, Serial Communication, etc.



## ❖ Free Hand Sketch



## ❖ Solidworks Model

Unregistered HyperCam 2



- Leave HyperCam Window Opened
- Iconize HyperCam Window to the Task Ba
- Hide HyperCam Window
- Capture layered/transparent windows (may :

Last Record Status: Total frames:

Stop Rec.

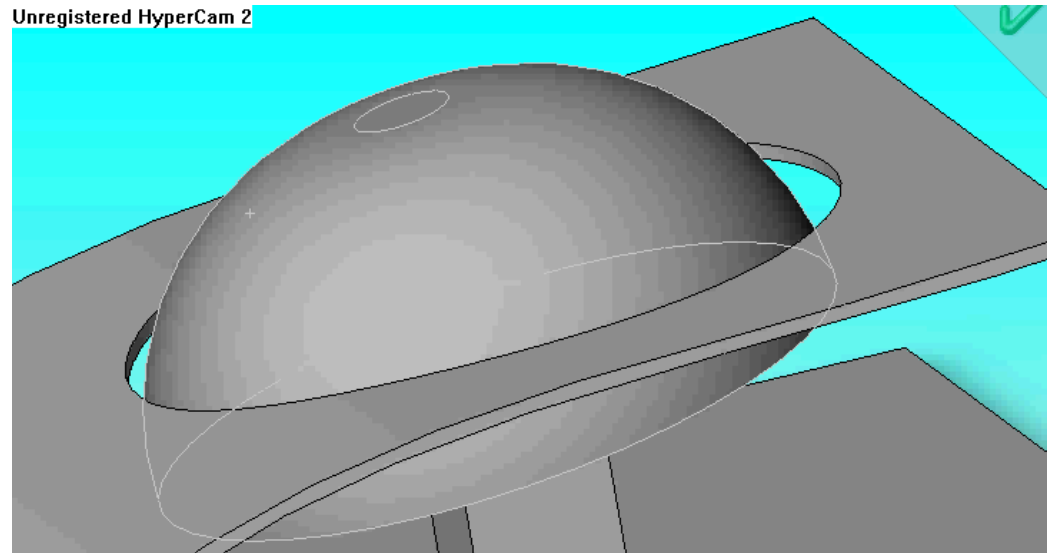
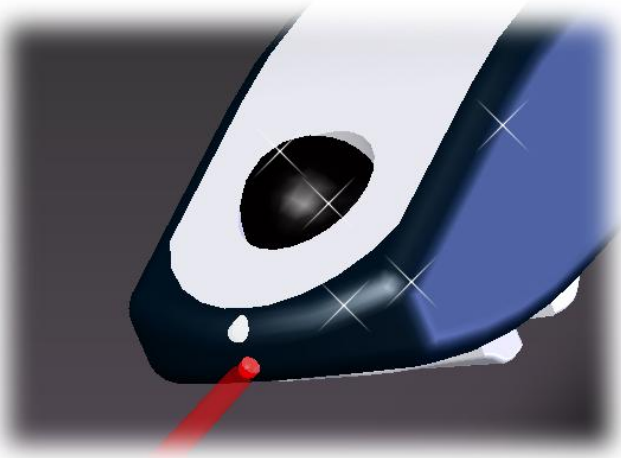
Pause Rec.

Play



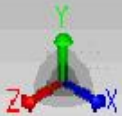
## ❖ Joystick

- Move a mouse curser, Manipulate a robot, etc.
- Ball shaped, Projected part is hidden.  
→ Prevent damages on it : robust design!



## ❖ Solidworks Model

Unregistered HyperCam 2



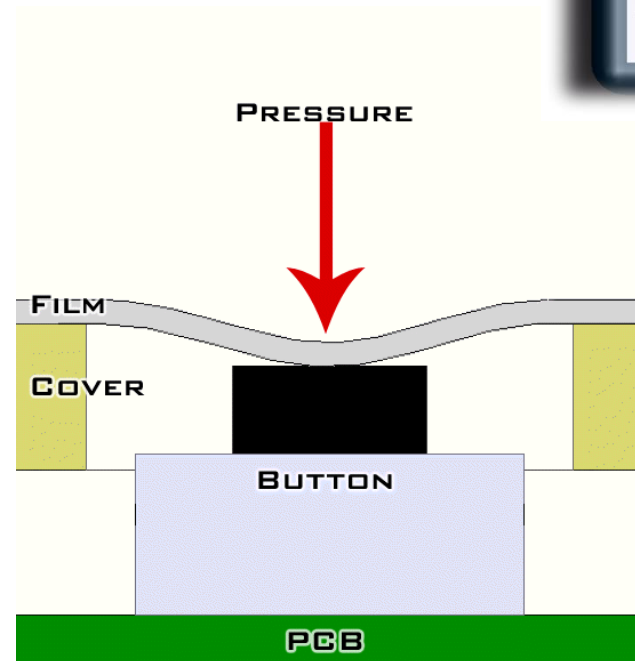
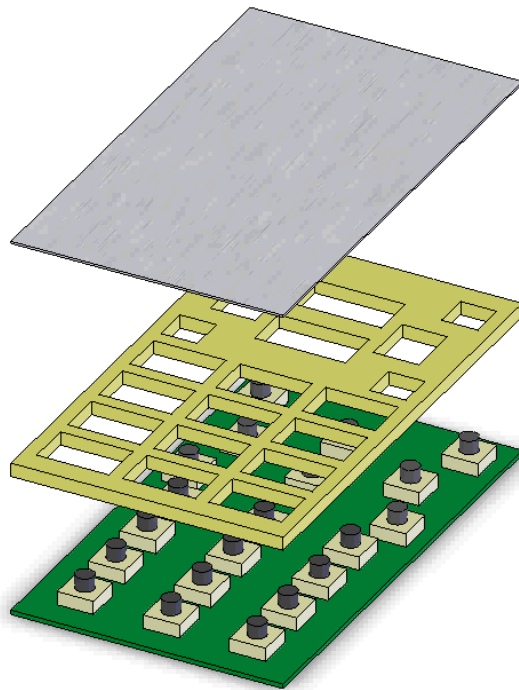


## ❖ Keypad

Make letters only with 12 keys(0~9, \*, #)

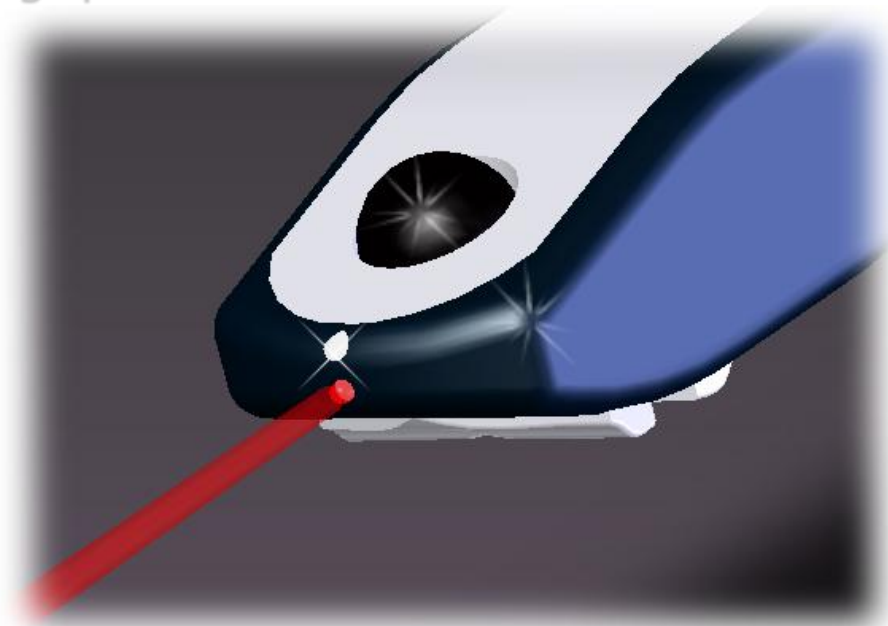
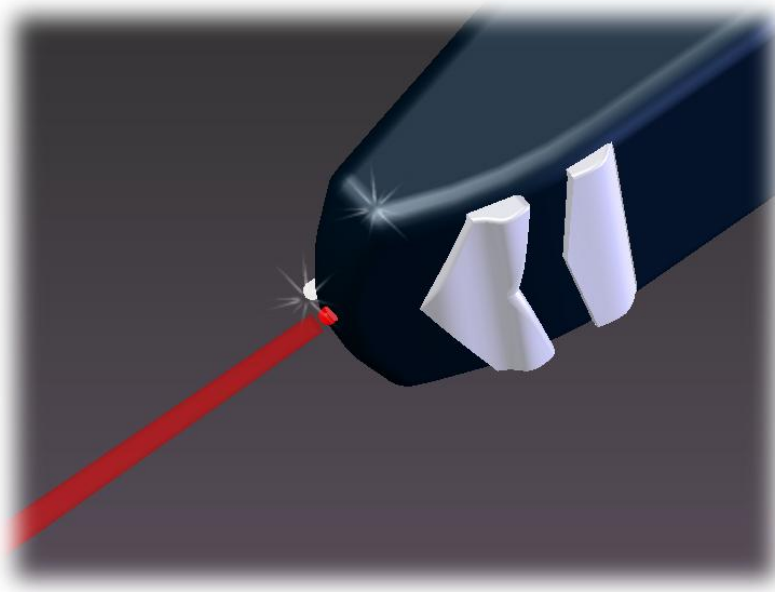
→ size of the device can be reduced much.

Unregistered HyperCam 2



## ❖ Other Parts

- Click Buttons
  - Curved surface for comfort grip
- Laser Pointer
- Battery Slot



## ❖ Software & Circuits

Application Program based on VC++

Electrical circuits : IR transceiver/receiver, decoder, etc.

### Application Program

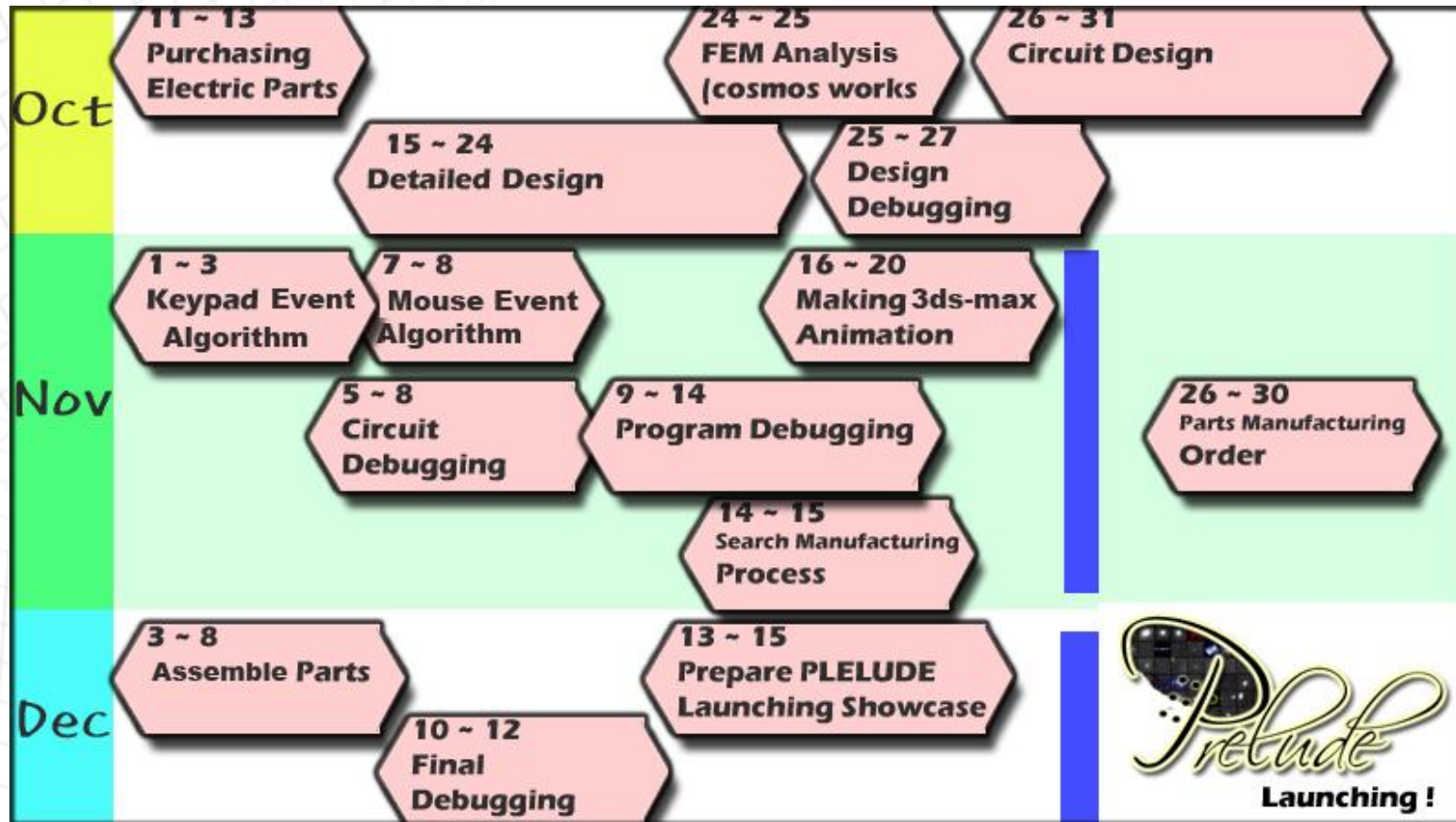
Signal  
Processing

Keypad/Mouse  
Algorithm

Optional  
Functions  
(e.g. Calculator,  
Multi-physics, Games)

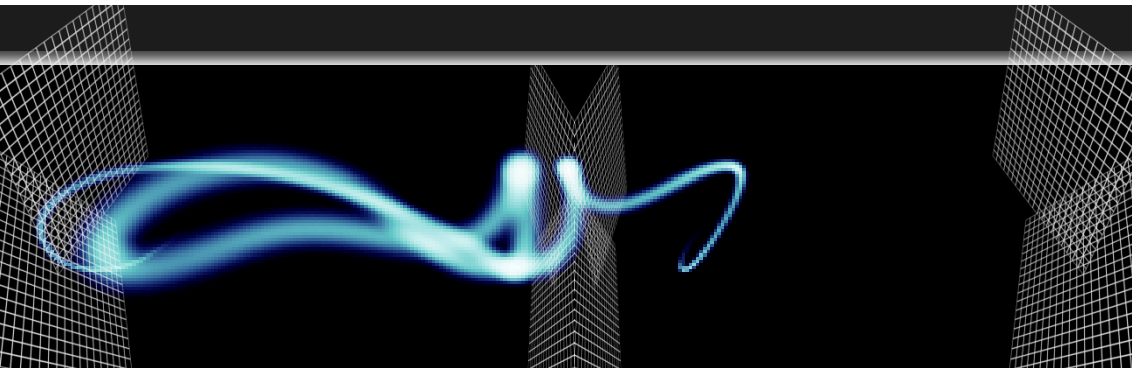


## ❖ Detailed Schedule





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***Thank you!***

