

# New Platform for Design Entertainment

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My suggestion to the "design entertainment", it means "to support the design as entertainment act of the designer".

# New Platform for Design Entertainment



# July 2012 - Sketching2012

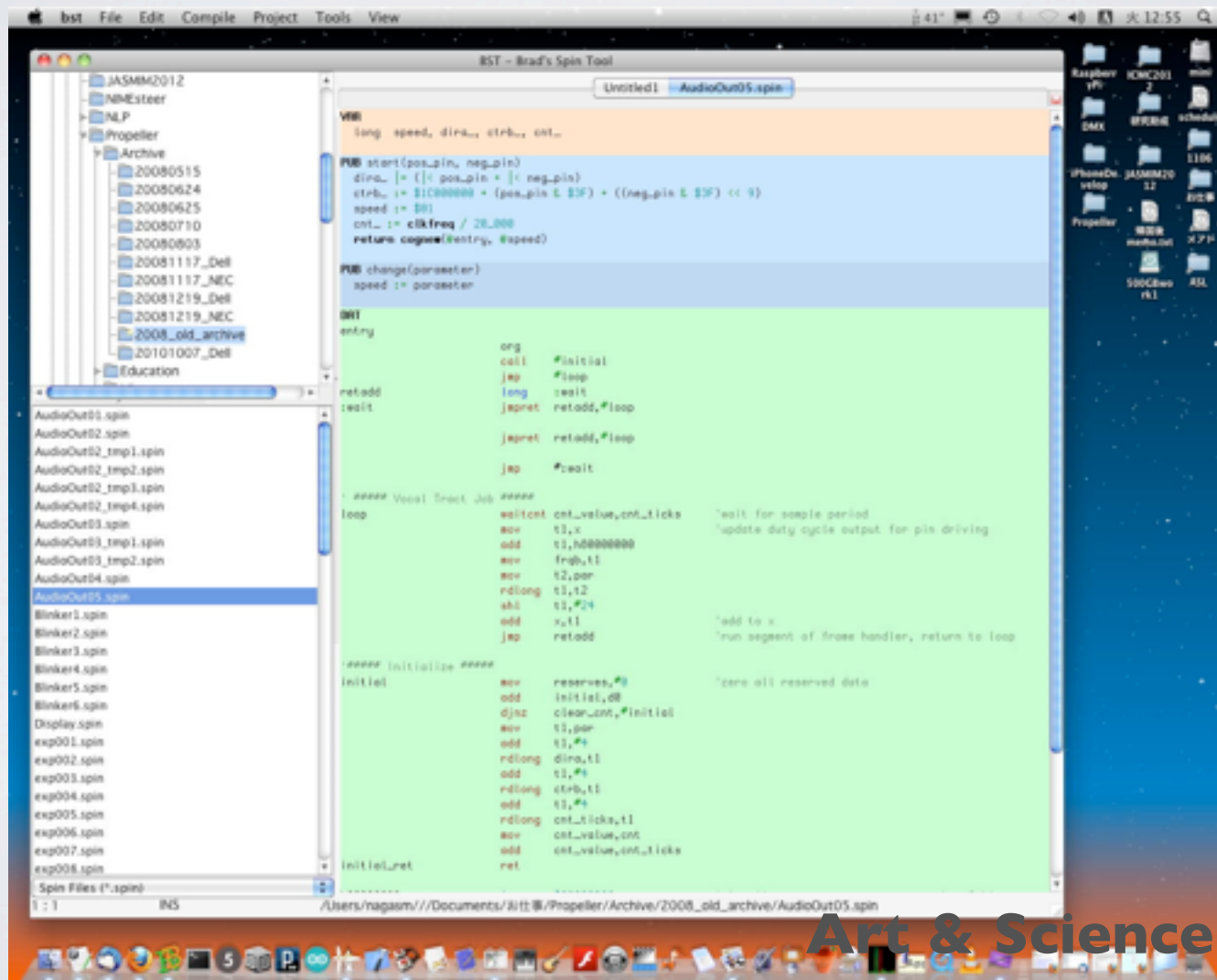
<http://nagasm.org/ASL/Jaminator/>



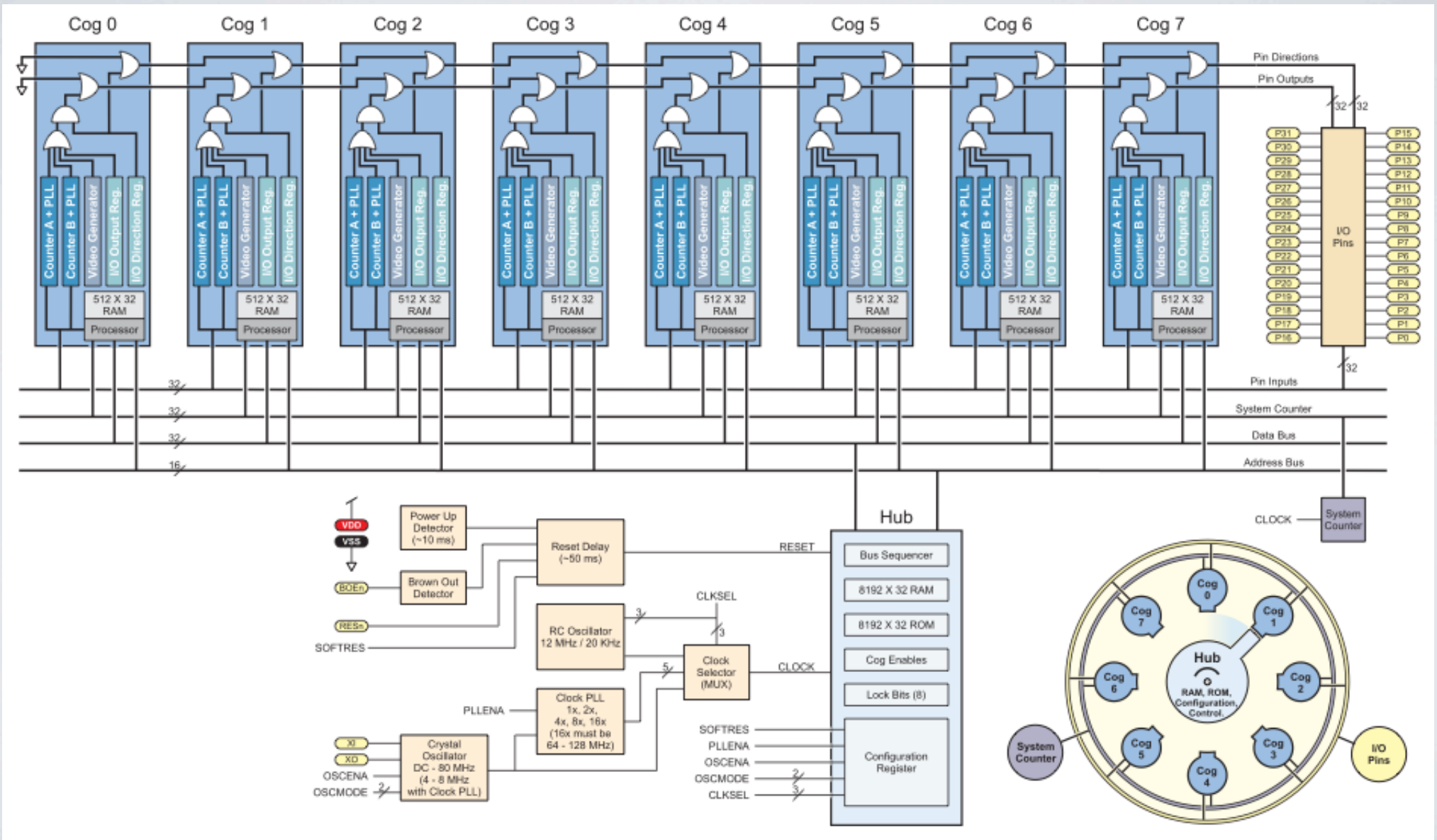


# August 2012 - I met "bst"

<http://nagasm.org/ASL/Propeller2/>

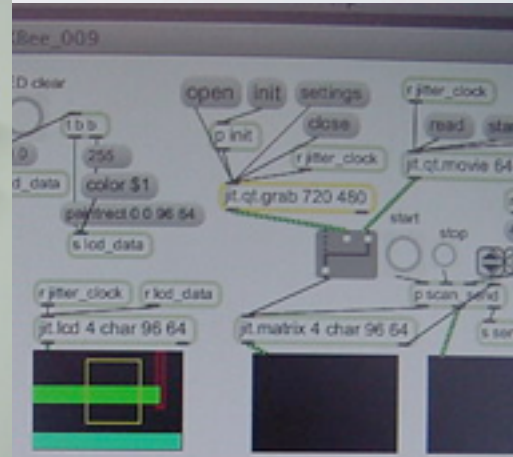
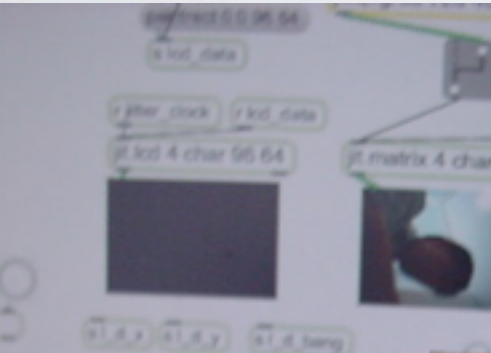
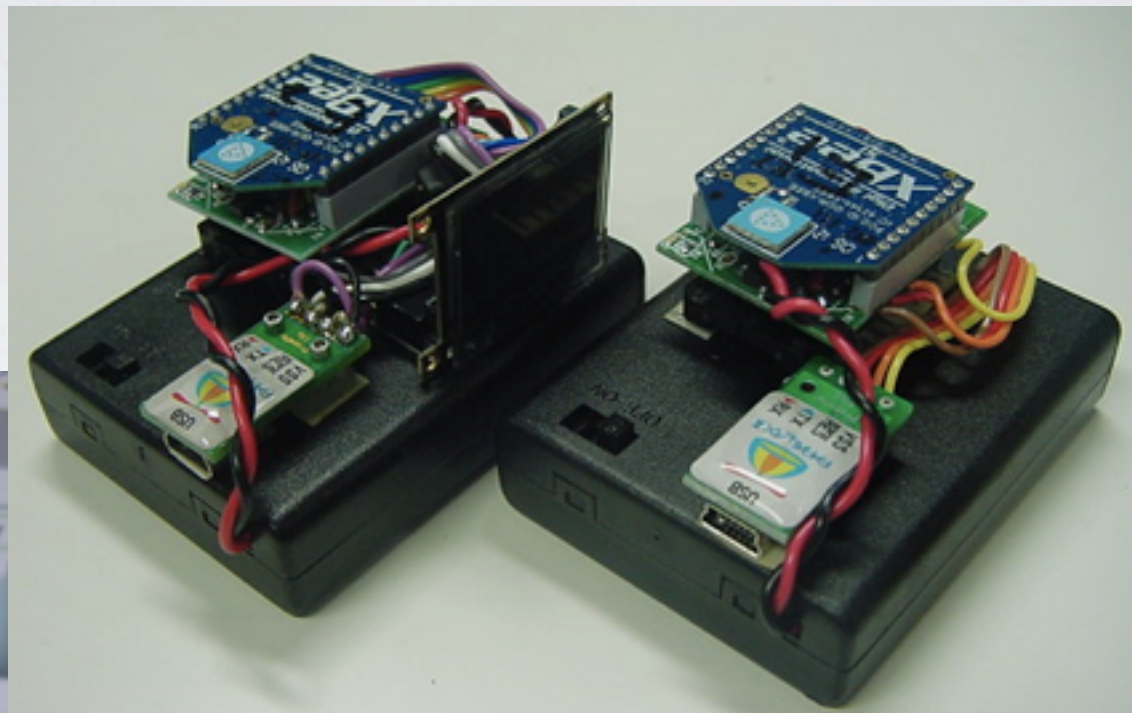


# Propeller Processor (Parallax)

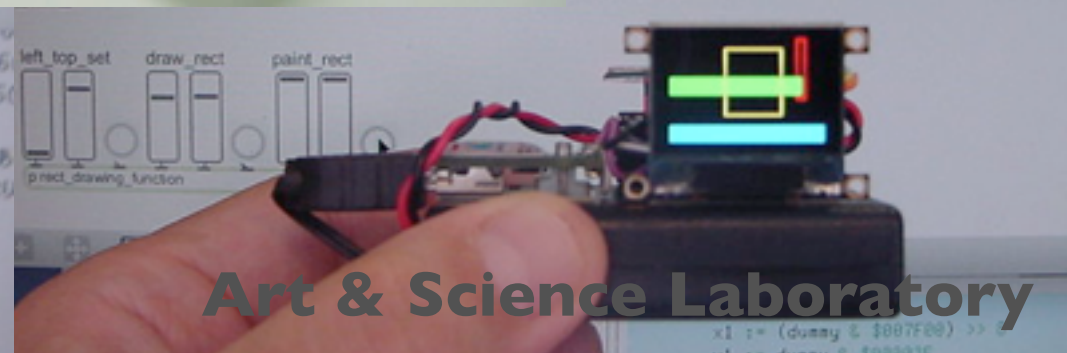


# September 2012 - ICMC2012

<http://nagasm.org/ASL/Propeller2/>



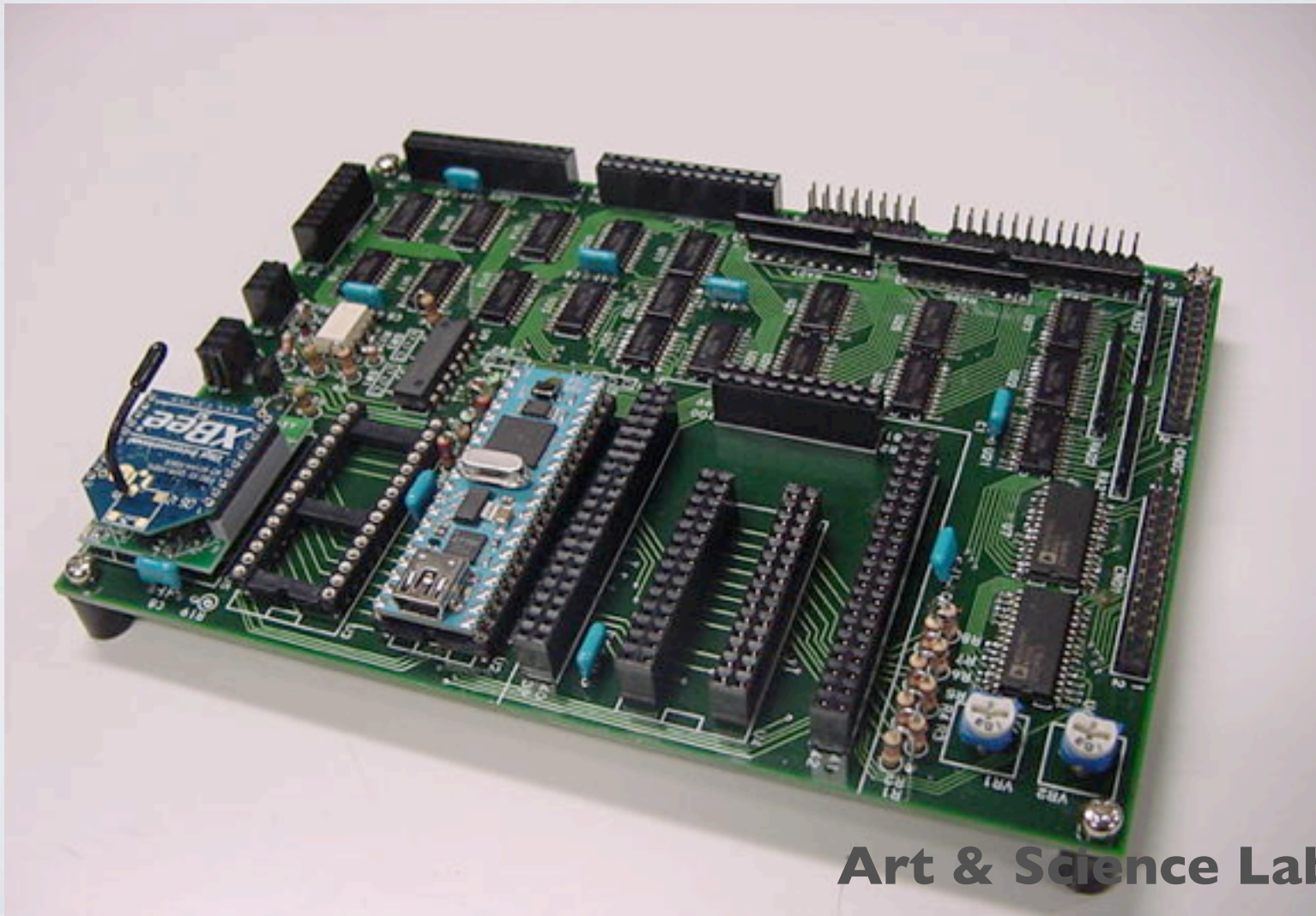
ISC00792.JPG" width=60  
ISC00795.JPG" width=60  
まだまだ着手できないのであ  
復活したいが、しばらく先になり





# 2012-2013 : SUACboard

<http://nagasm.org/ASL/Propeller3/>





# Main Purpose of SUACboard

- Universal Platform for Media-Arts
- Educational Platform for Designers
- **Extend the possibilities of the system**

Using Arduino/Gainer only



**LIMITED** ports !!

# Example - Installation Works

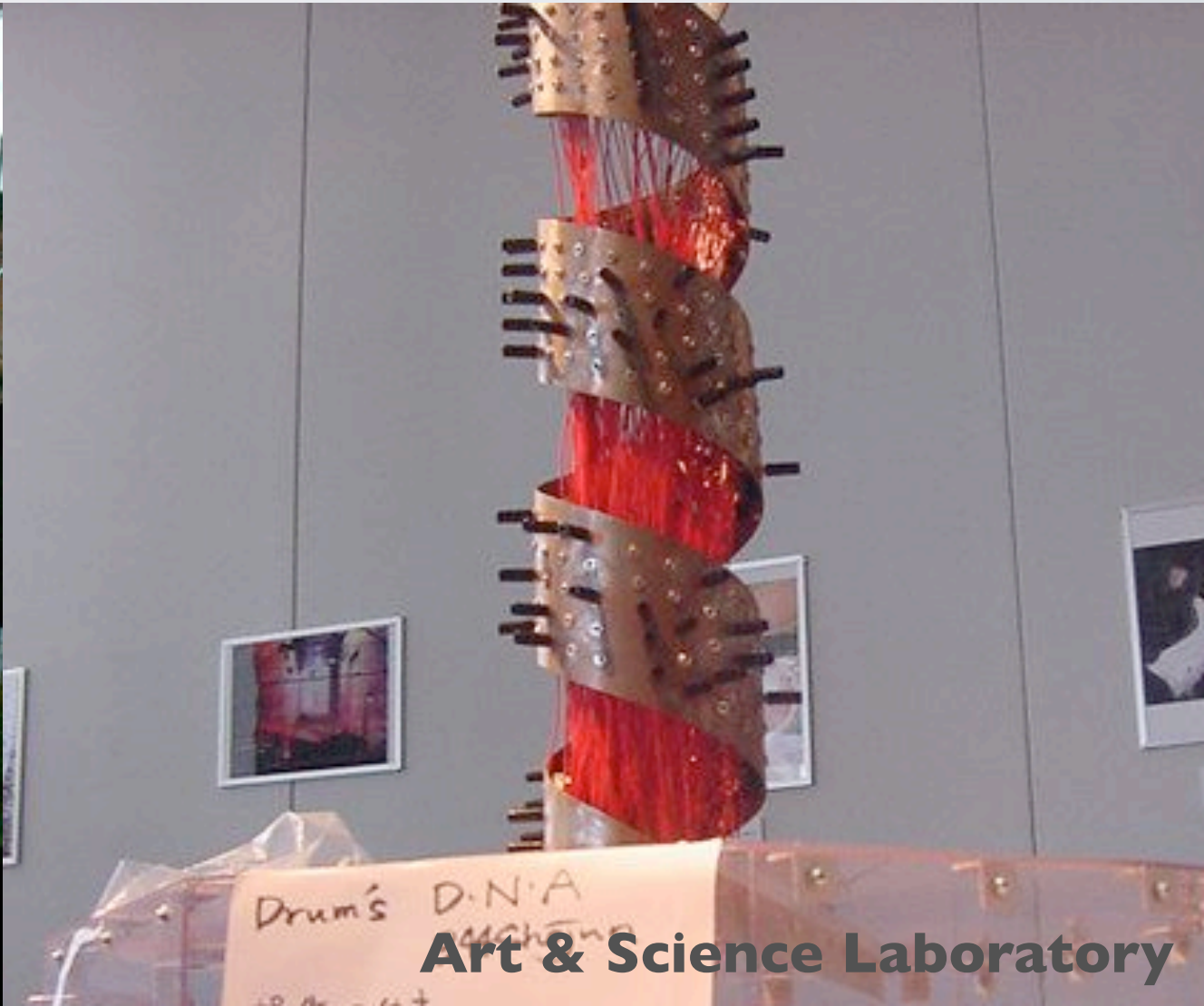
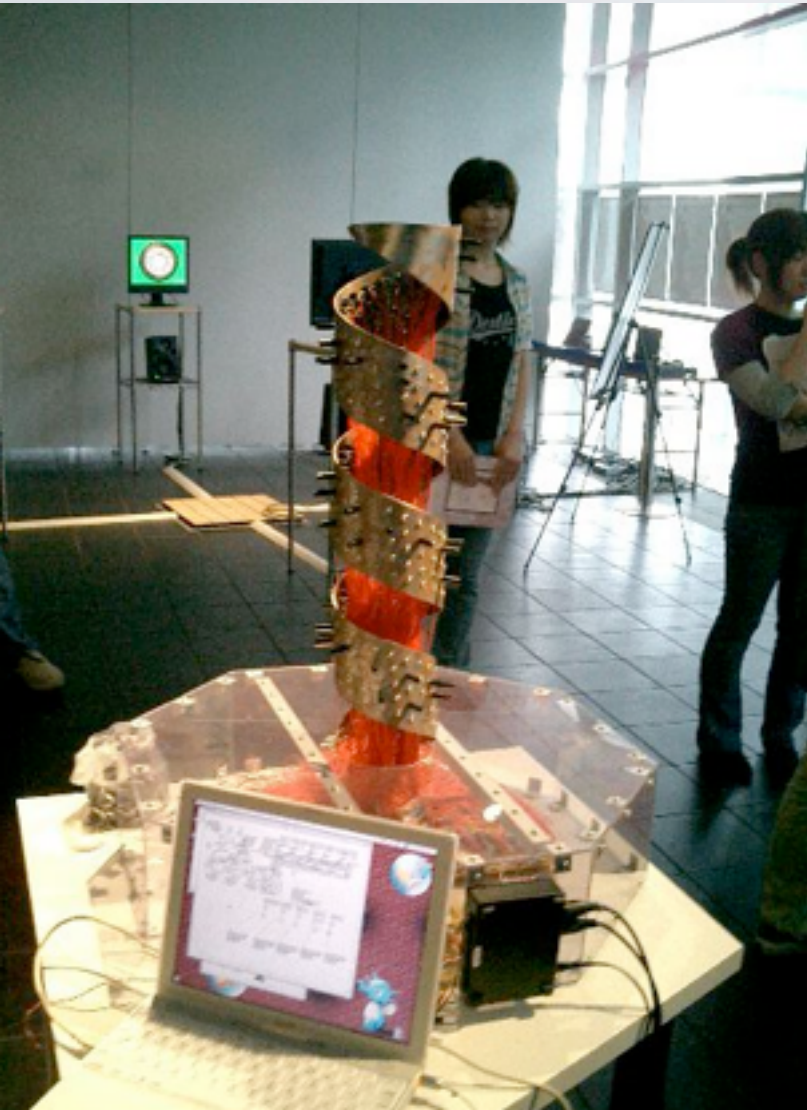
Designer wants to use “many” things.





# Example - Installation Works

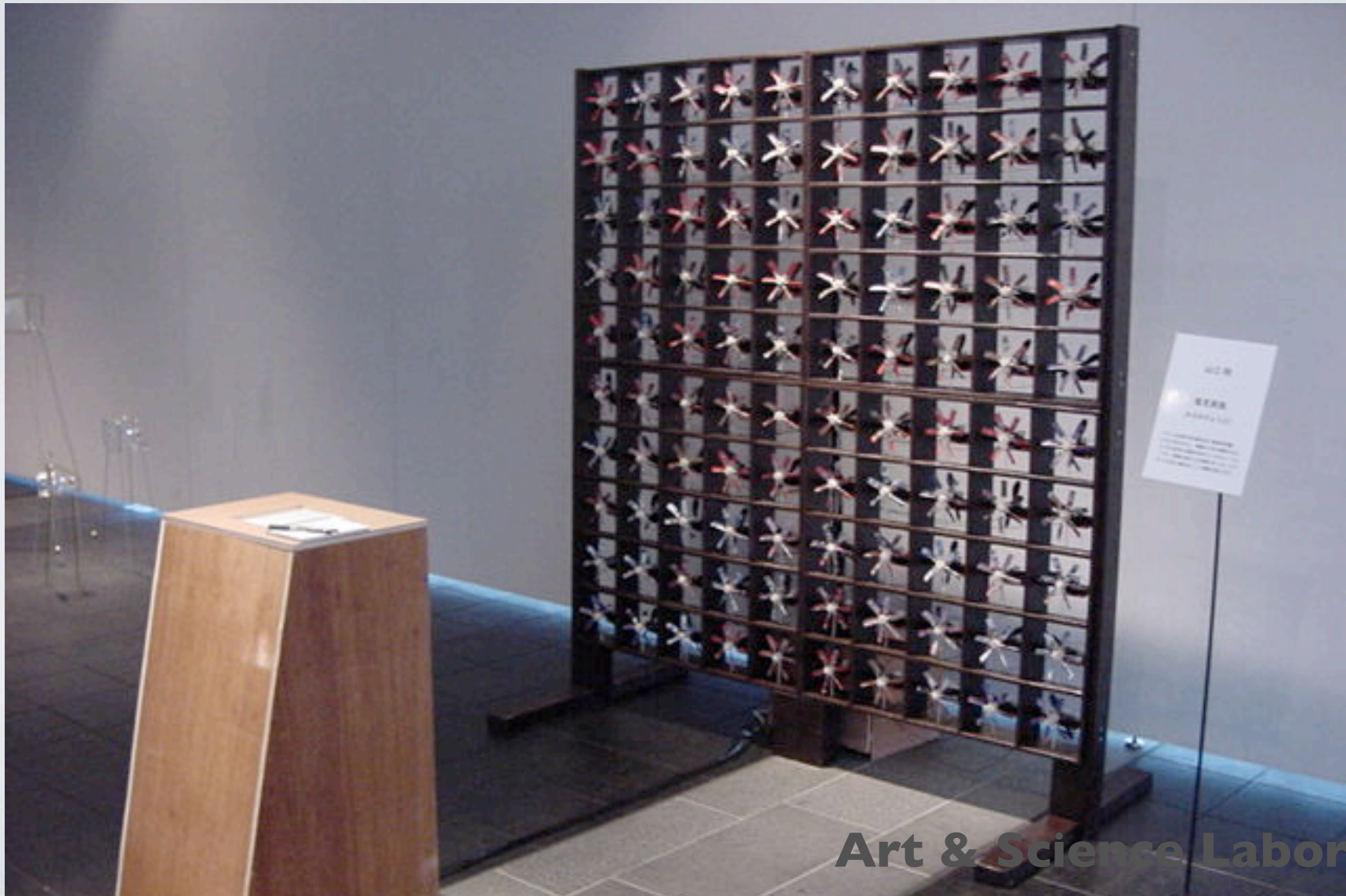
Designer wants to use “many” things.





# Example - Installation Works

Designer wants to use “many” things.





# Example - Installation Works

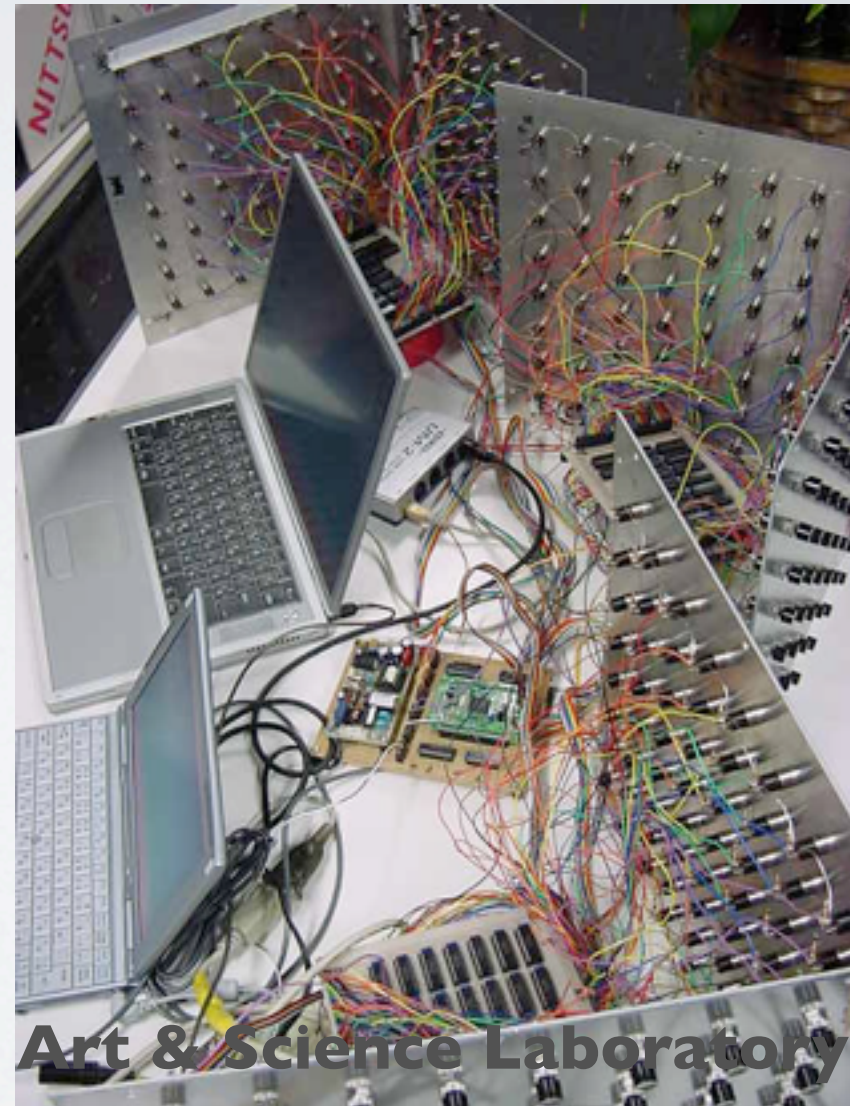
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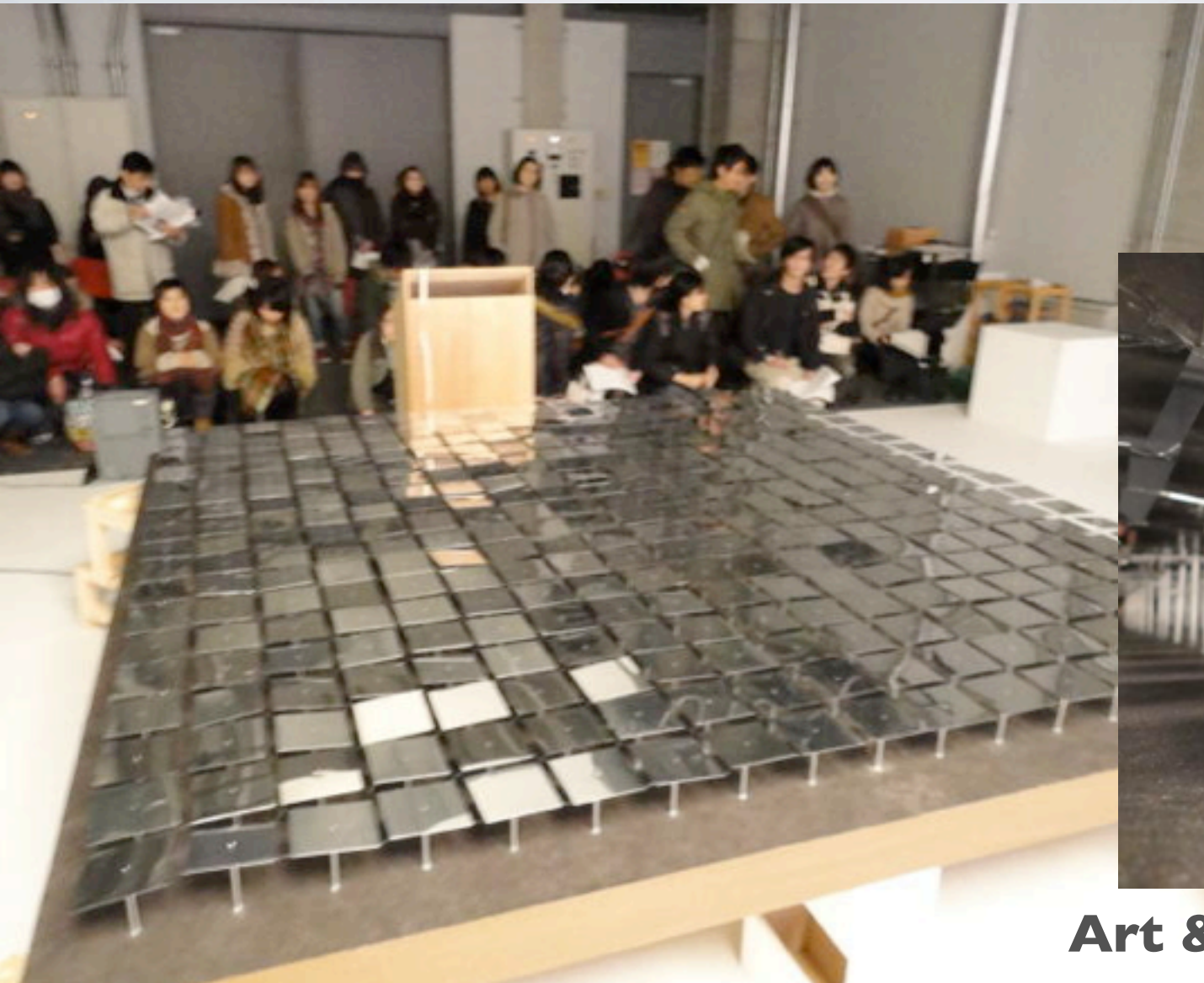
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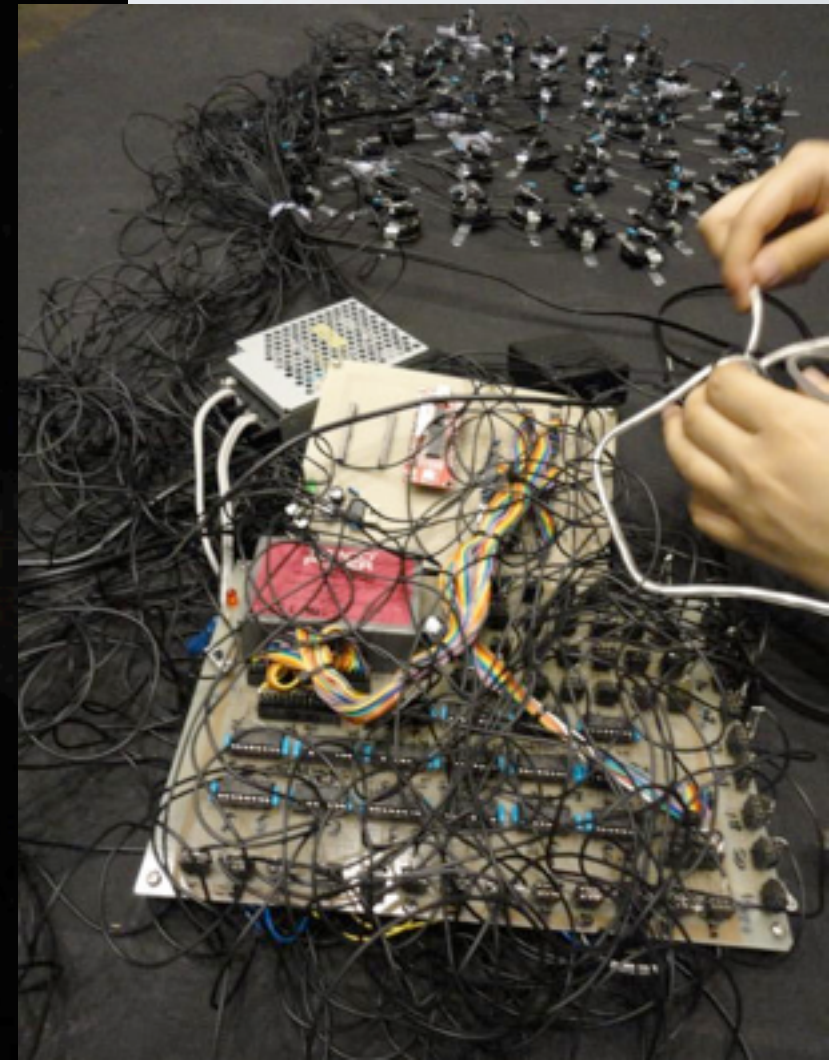
Designer wants to use “many” things.





# Example - Installation Works

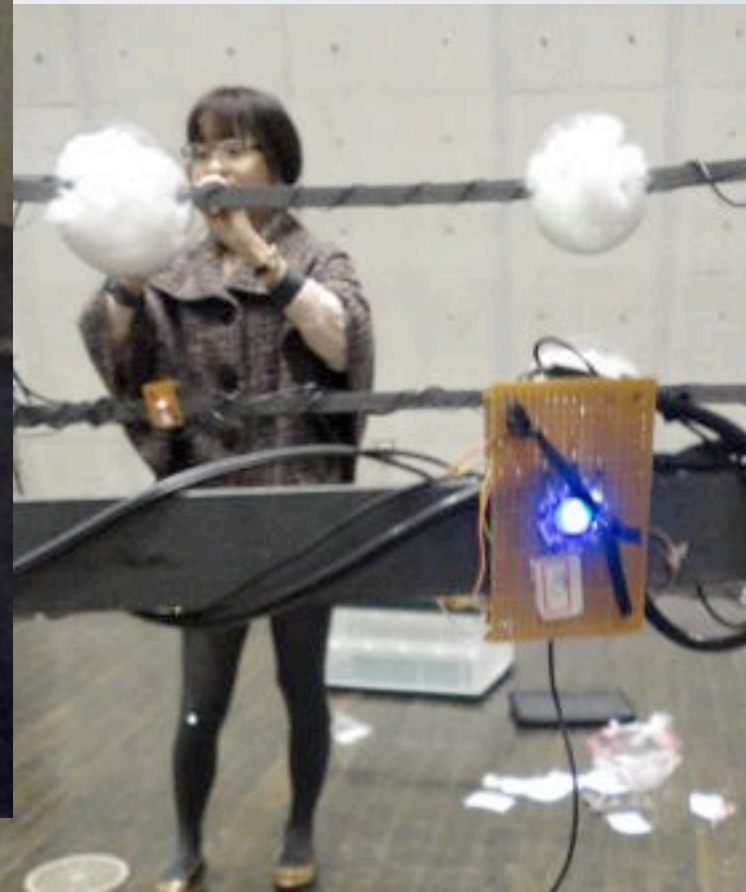
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# Example - Installation Works

Designer wants to use “many” things.





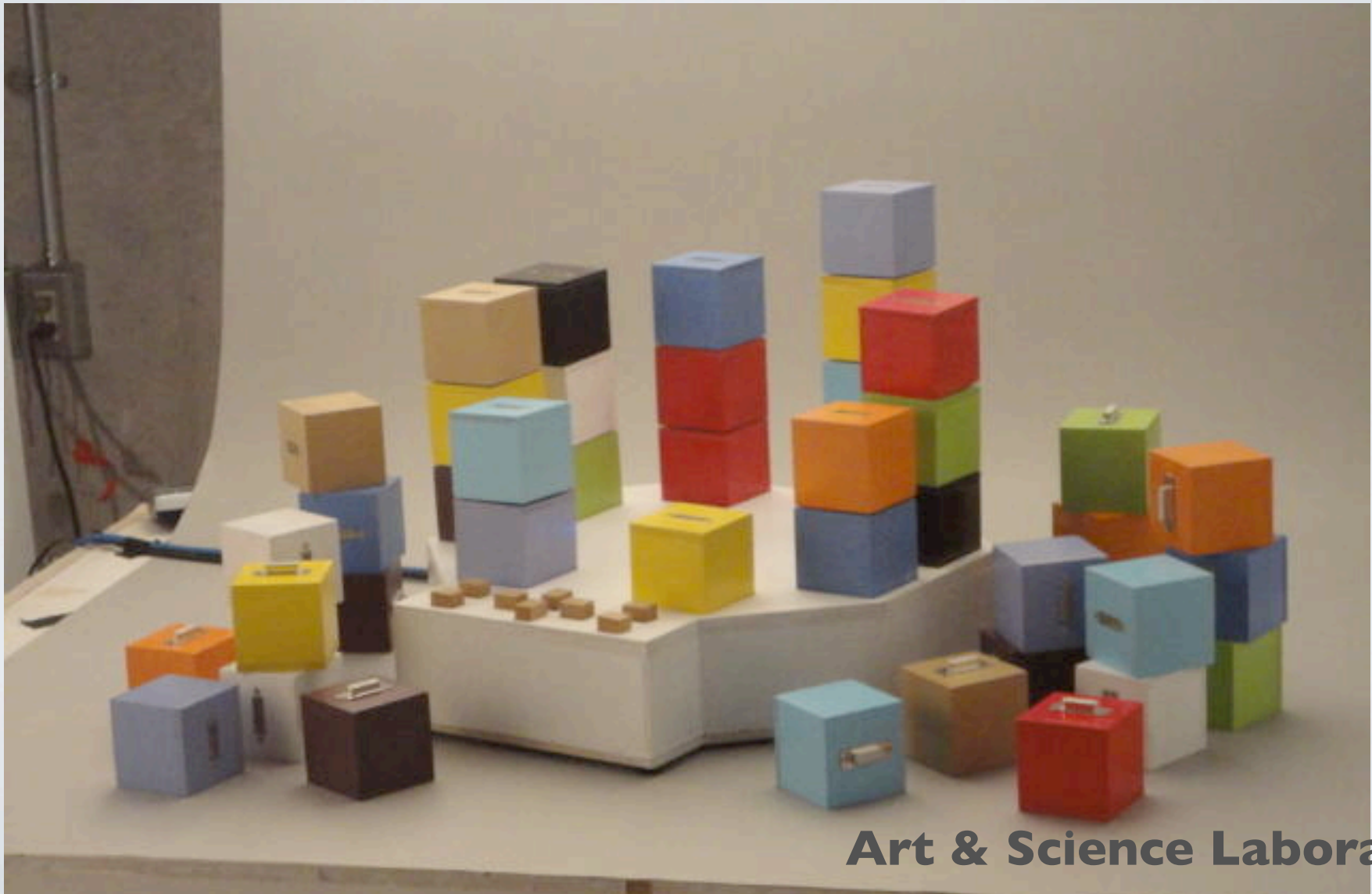
# Example - Installation Works

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# Example - Installation Works

Designer wants to use “many” things.





# 4 Targets

- AKI-H8
- Arduino
- GAINER
- Propeller

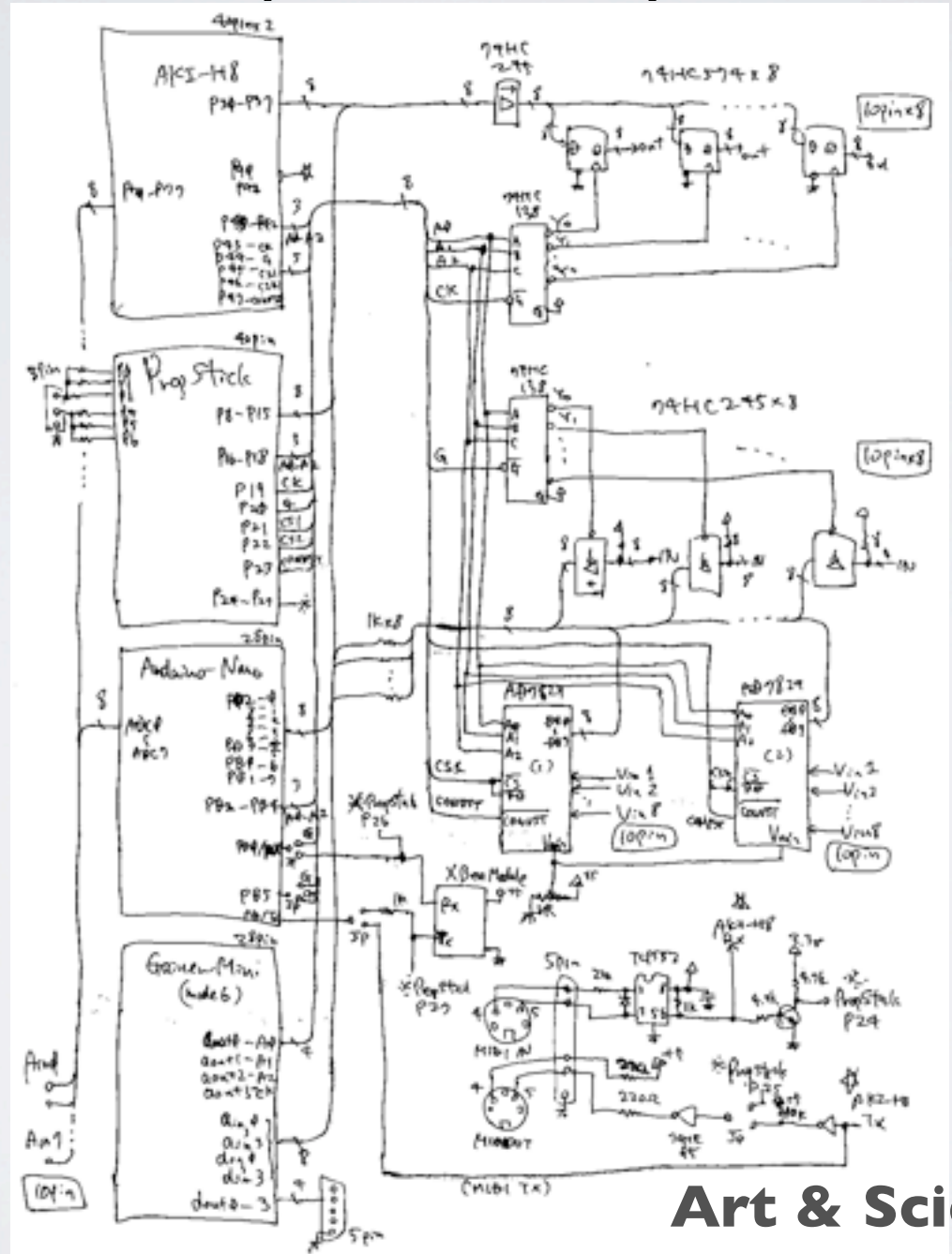
System 項目	AKI-H8	Arduino	GAINER	Propeller
CPU	Hitachi H8/3048 32bits	Atmel ATmega 8bits	Cyperss 8bits CY8C29466	32bits * 8 CPU
clock	16/25 MHz	16 MHz	12 MHz	80 MHz
RAM	4K bytes	1K bytes	2K bytes	32K bytes
EEPROM	128K bytes	16K bytes	32K bytes	32K bytes (external only)
Power Supply	+5V	+5V	+5V	+3.3V
IDE	MS-DOS batch	Processing like	Max/MSP Flash Processing	original IDE
Language	Assmblar C	C	Max/MSP Flash Processing	Spin Assembler
PC interface	RS232	USB	USB	USB
Standalone	○	○	×	○
Serial Ports	2	1	4 (max)	8 (max)
A/D	12bits / 8ch	10bits / 6ch	14bits / 12ch	16bits / 28ch(max)
Audio D/A Out	100KHz 8bits 2ch	6ch PWM	×	44.1KHz 16bits 14ch(max)
Video Out	×	×	×	NTSC/PAL 2ch (max)
Character/Font Table	△	×	×	○
inter process communication	interrupt / polling hand-shake	polling	polling	shared memory polling
fast response	○ interrupt	×	×	○ parallel CPU
MIDI Out	○	○	○	○
MIDI In	○	×	×	○

# SUAC board (ver.0.5) SPEC :

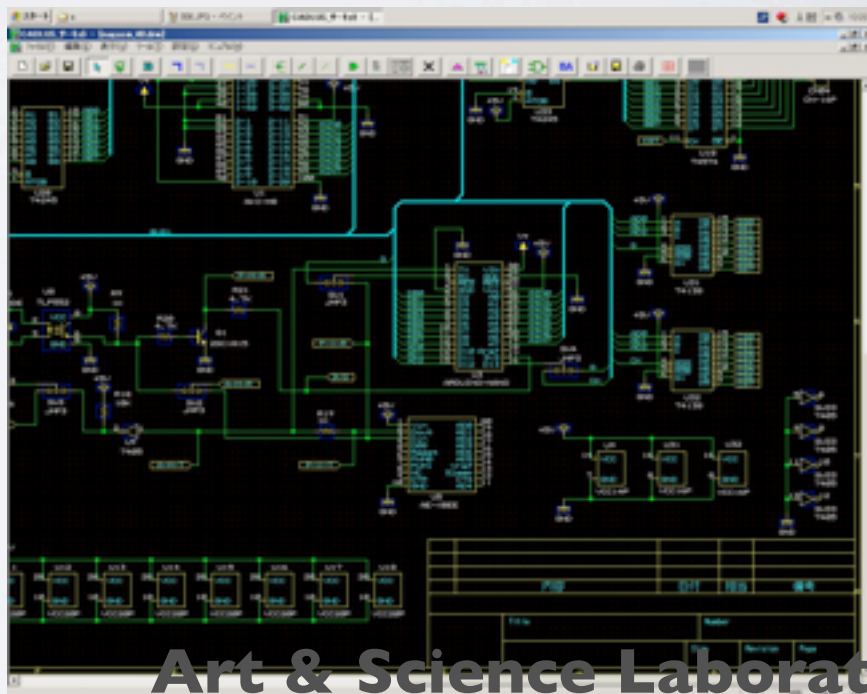
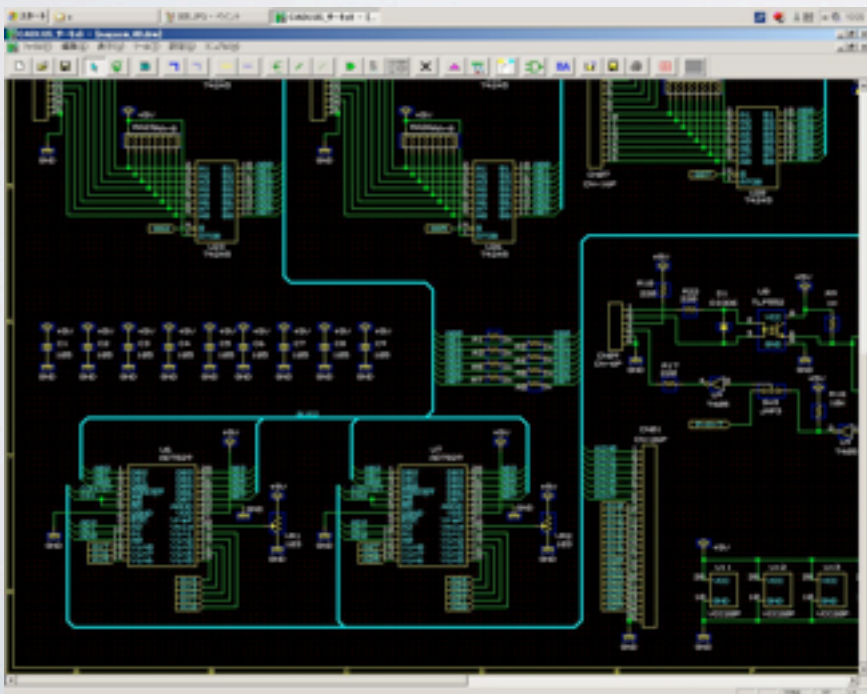
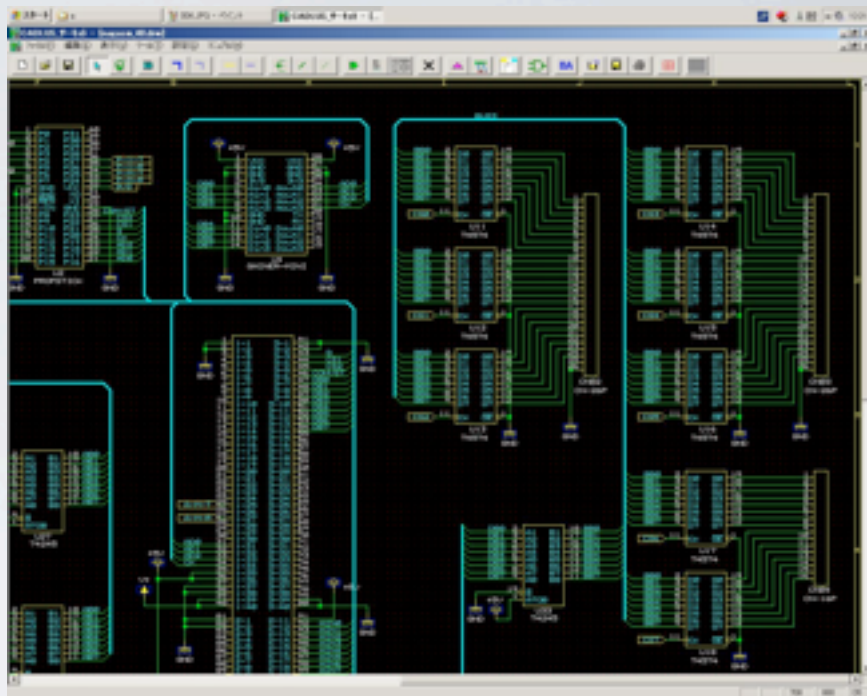
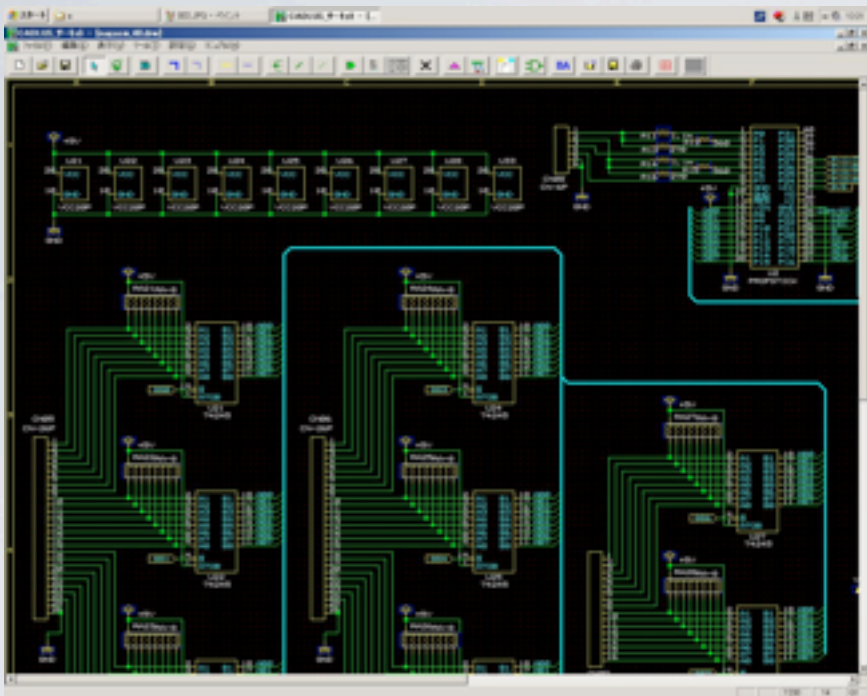
- 64 digital inputs
- 64 digital outputs (PWM - Propeller/AKI-H8)
- 24 analog inputs
- XBee - in/out
- MIDI - in/out
- 2 Video outputs (★ Propeller only)



# SUAC board (ver.0.5)

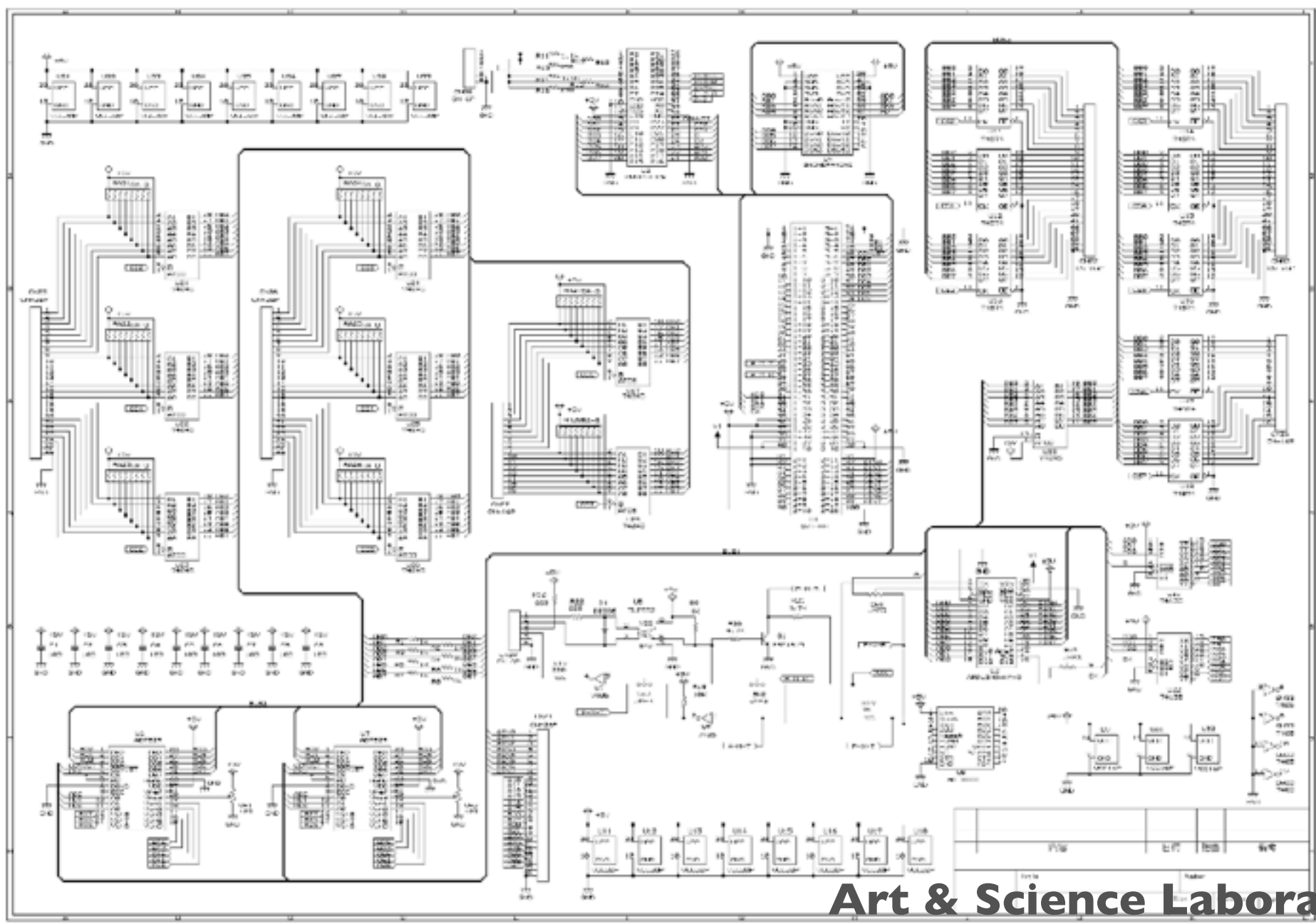


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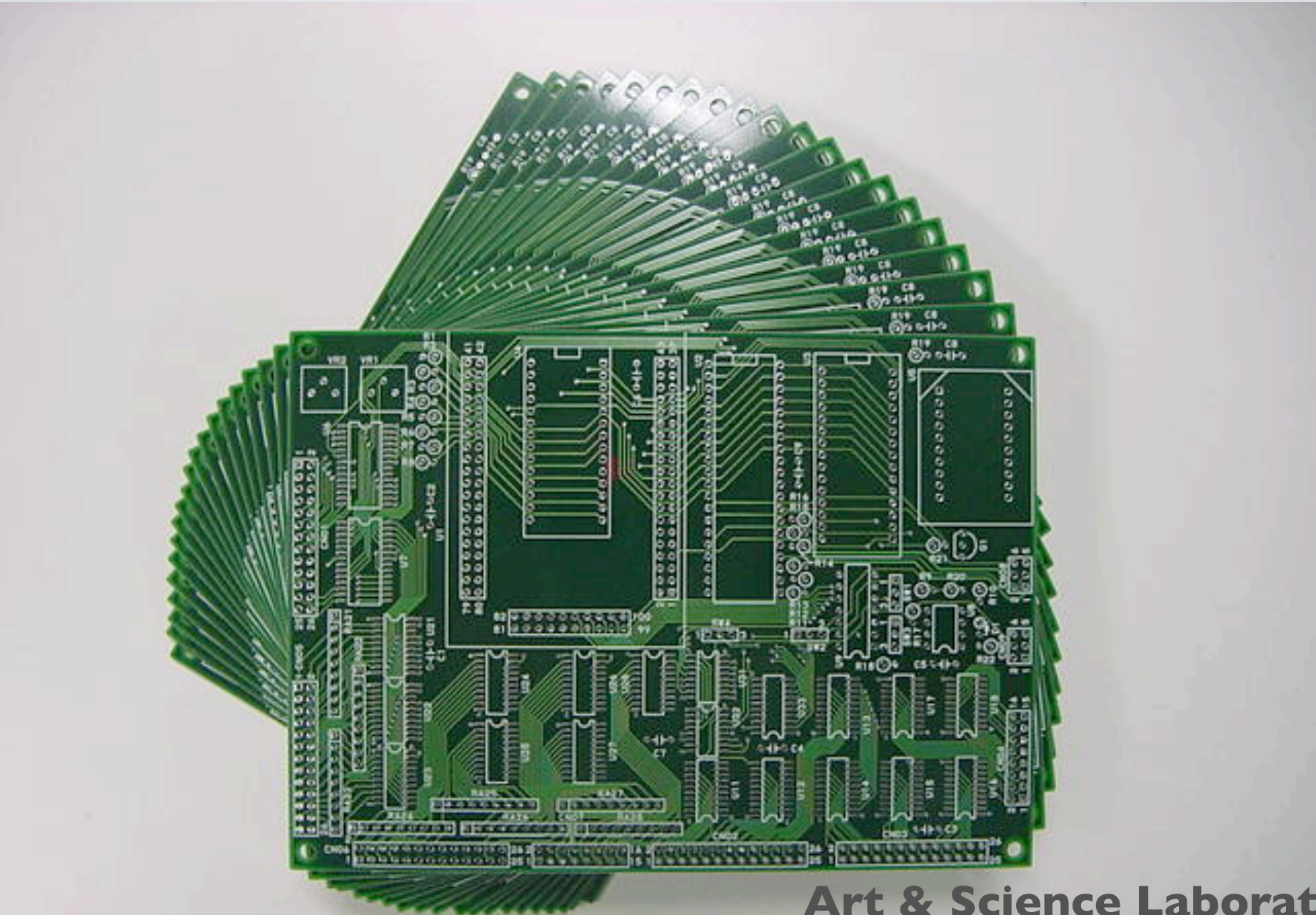




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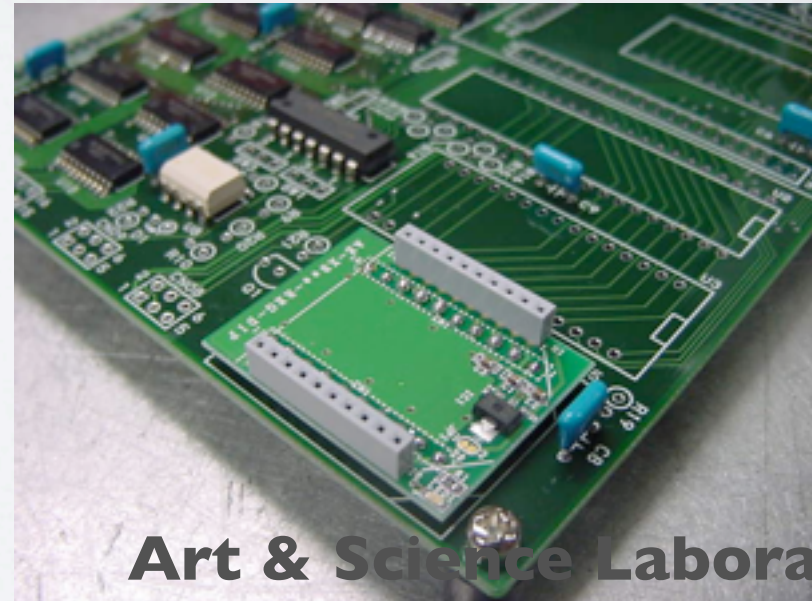
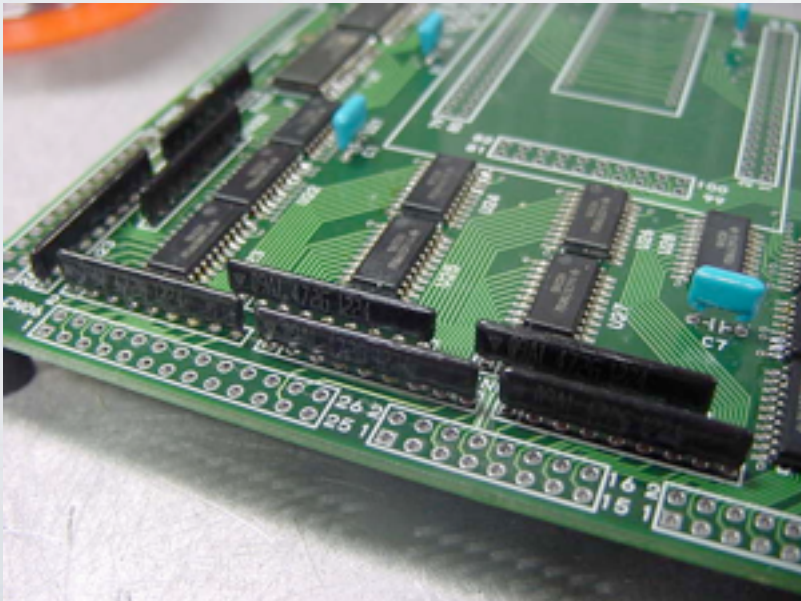
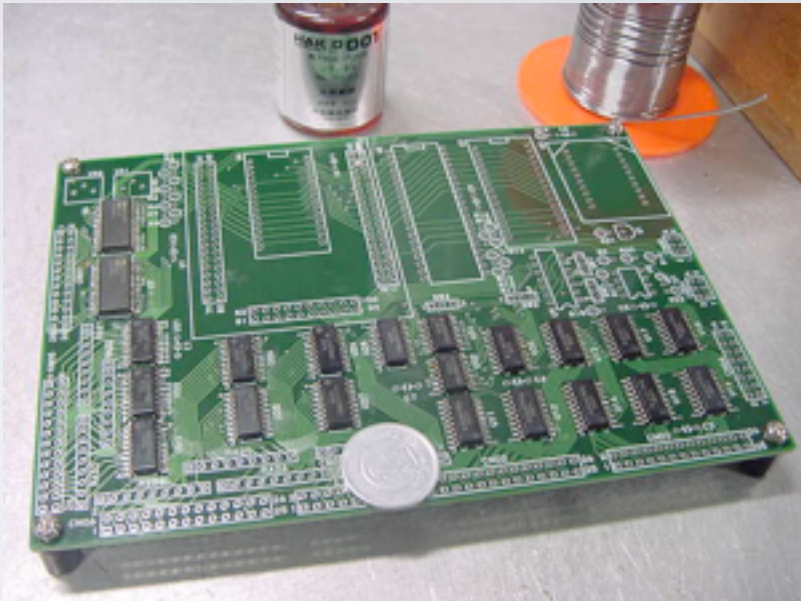
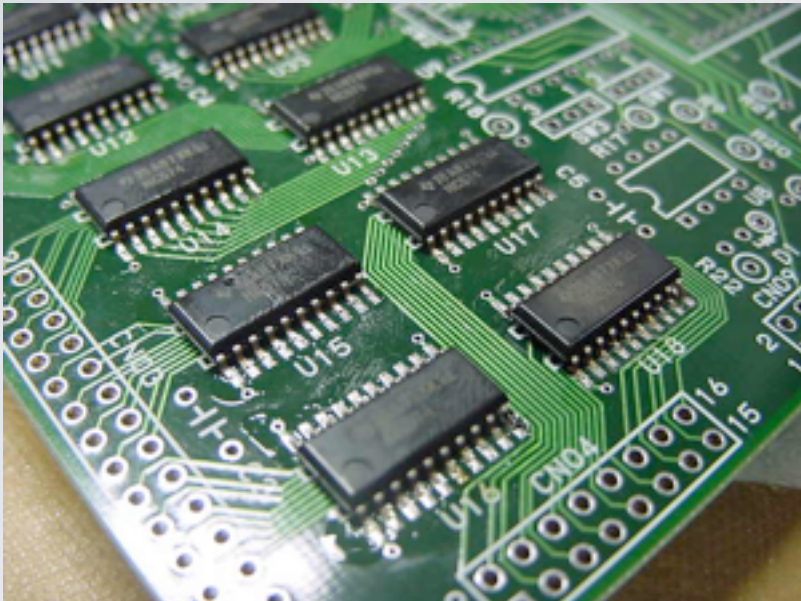


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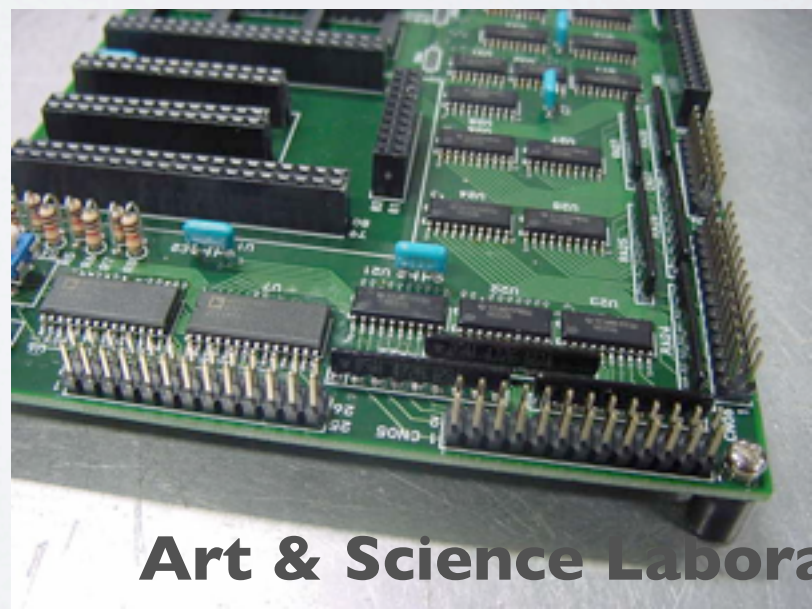
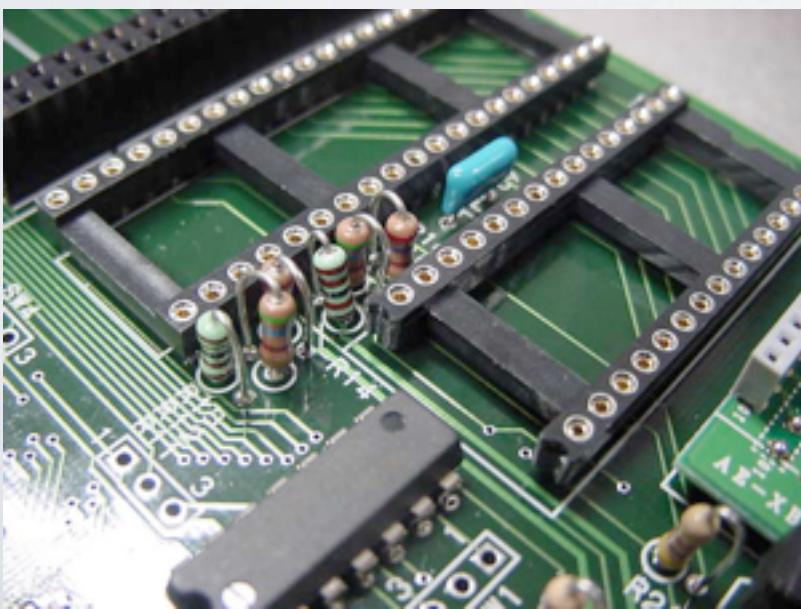
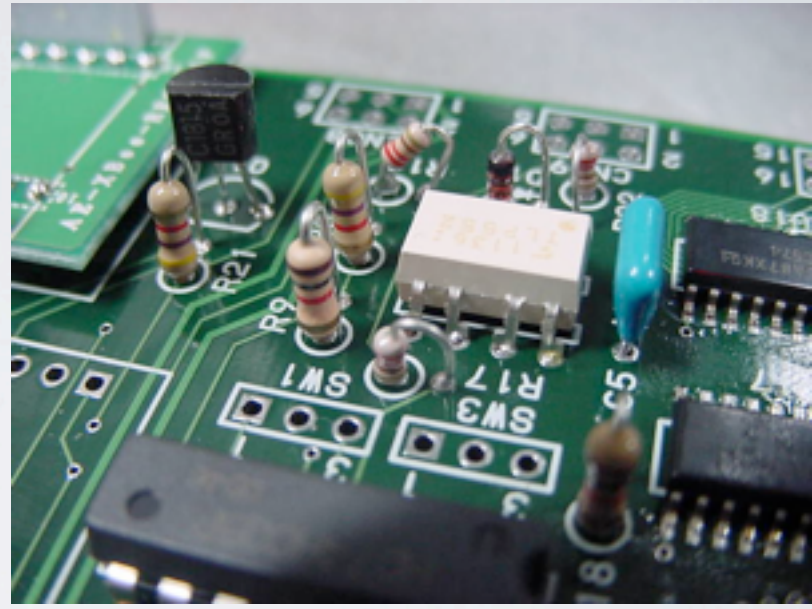
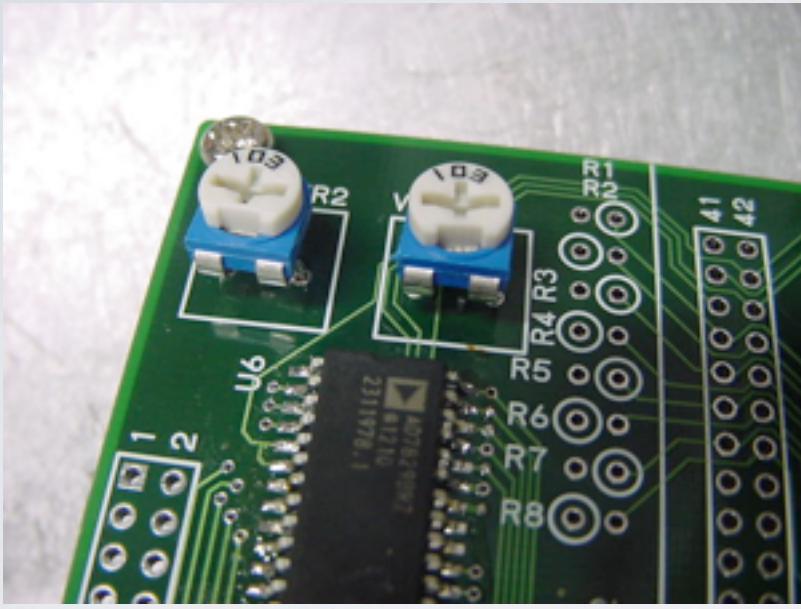


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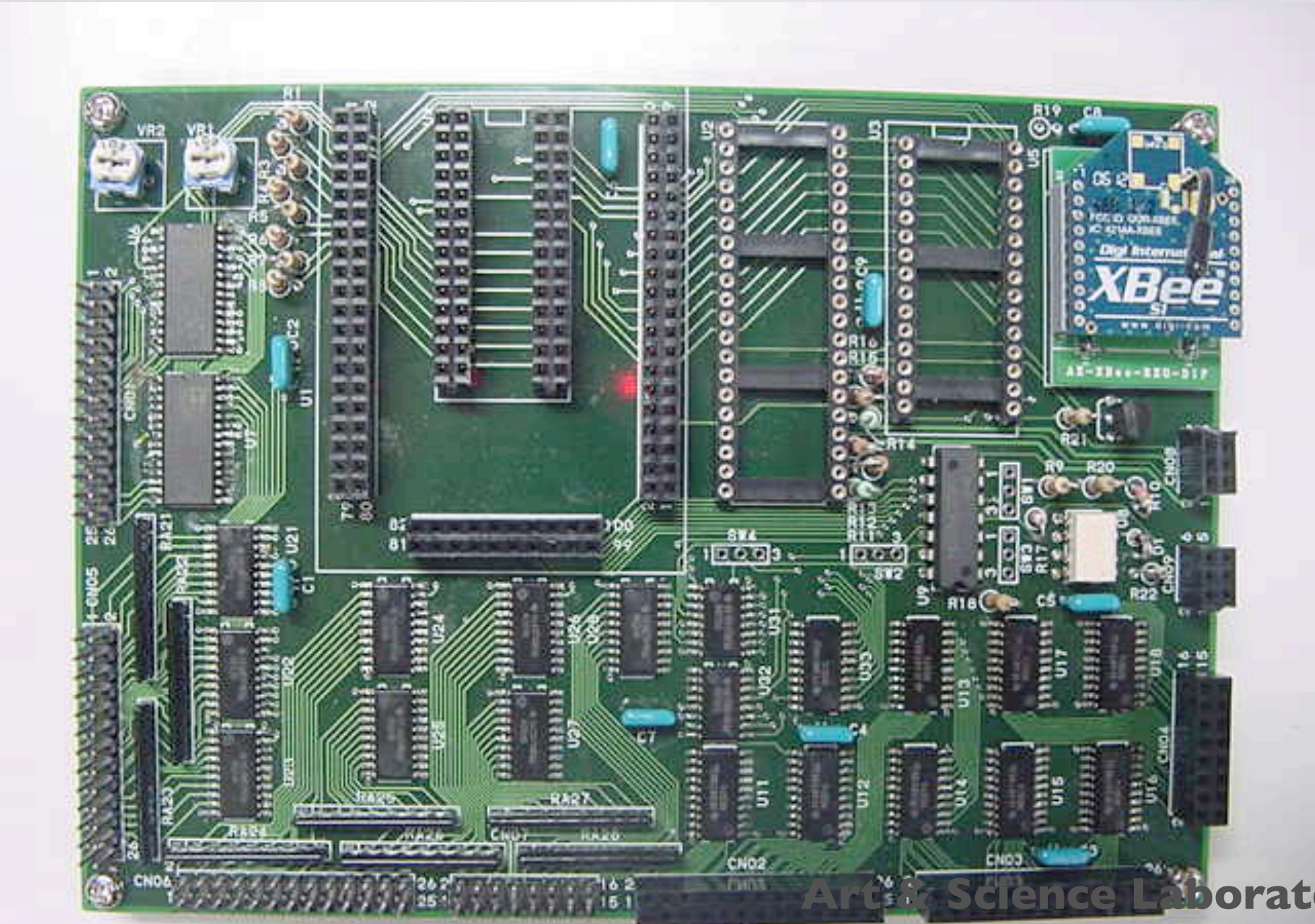


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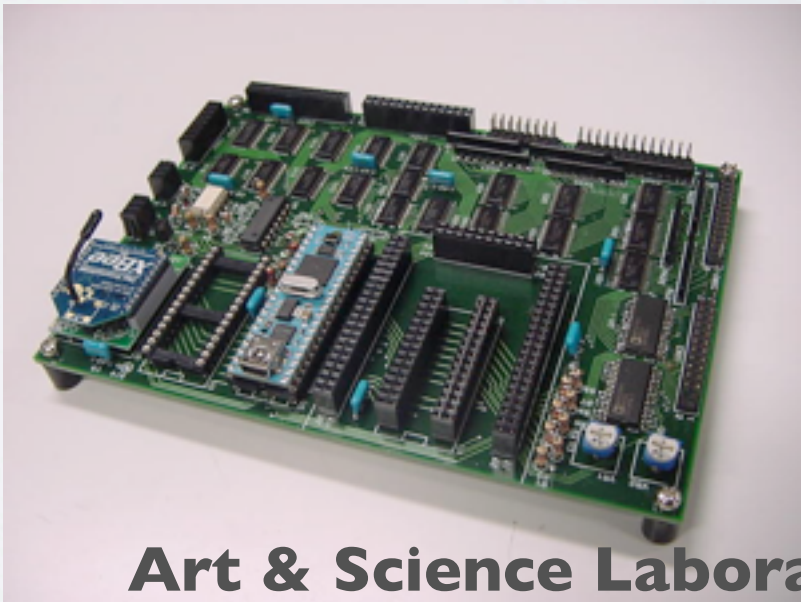
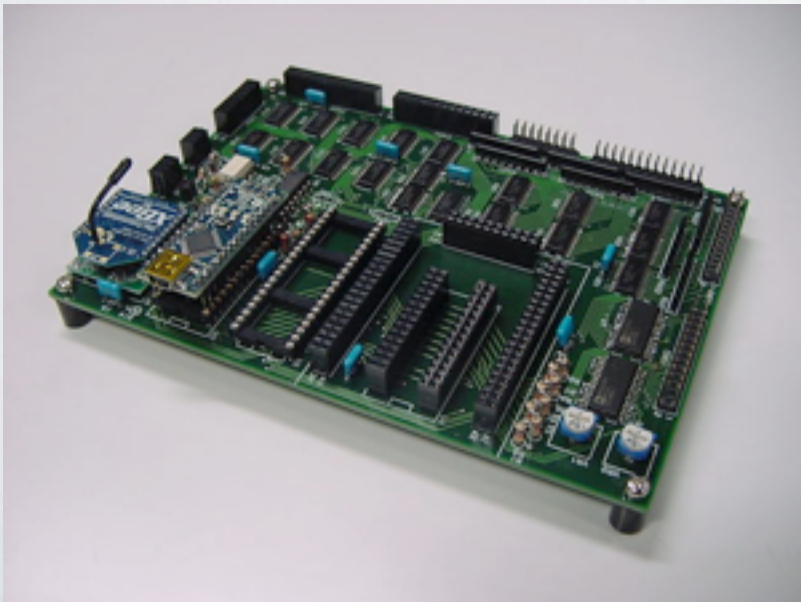
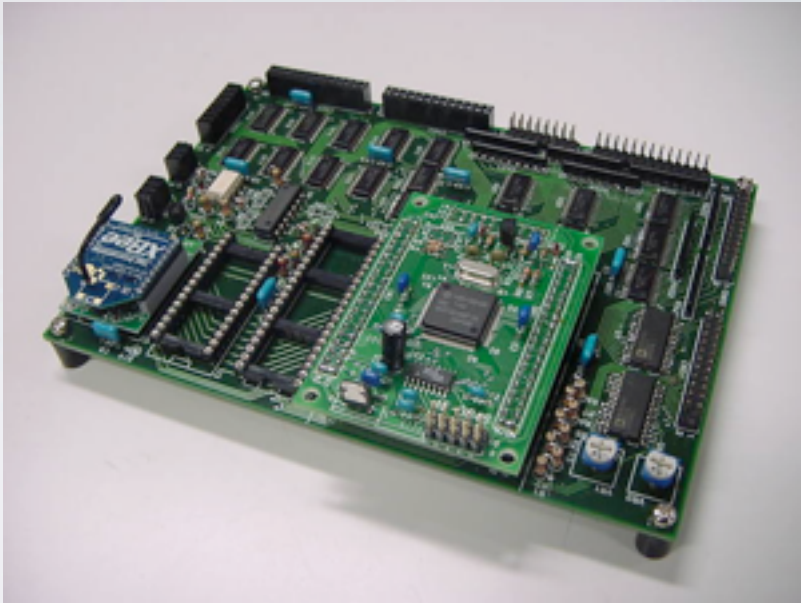
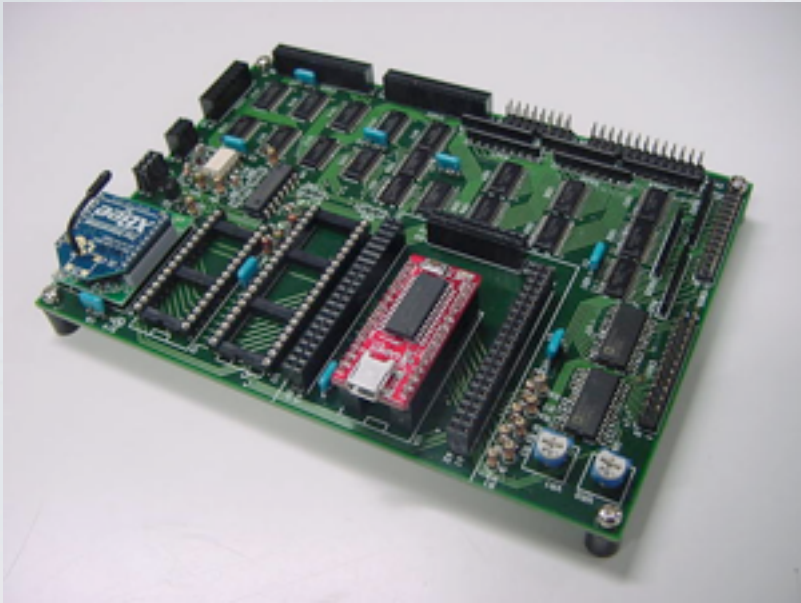


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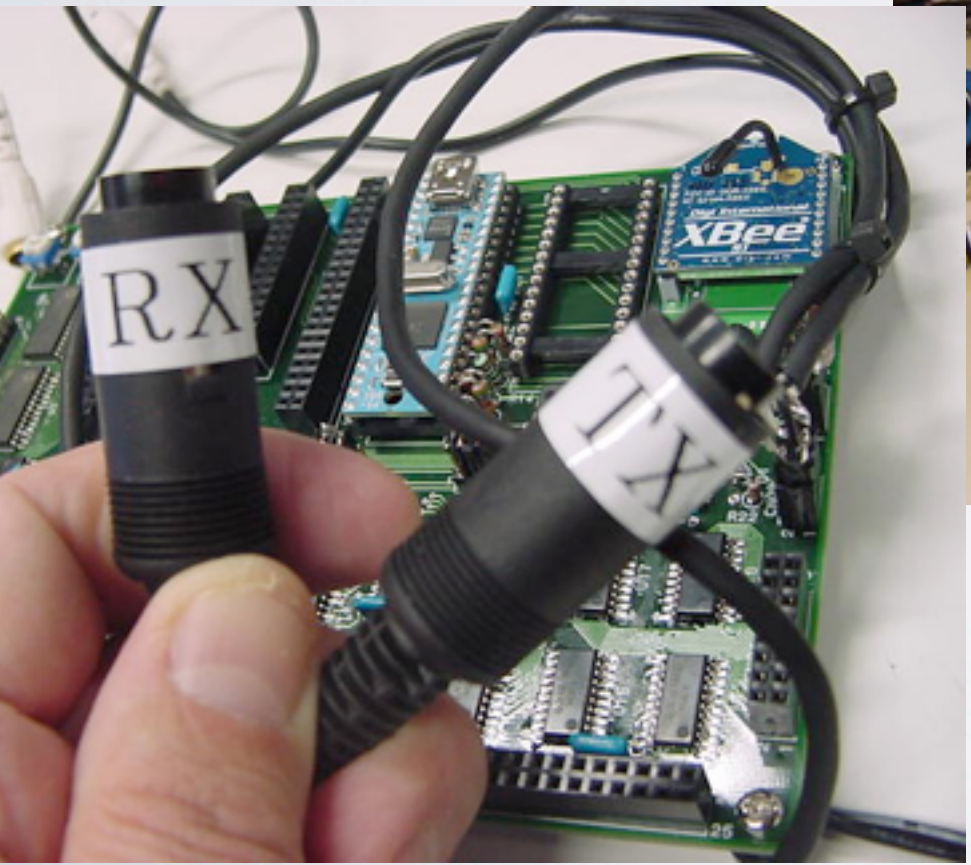
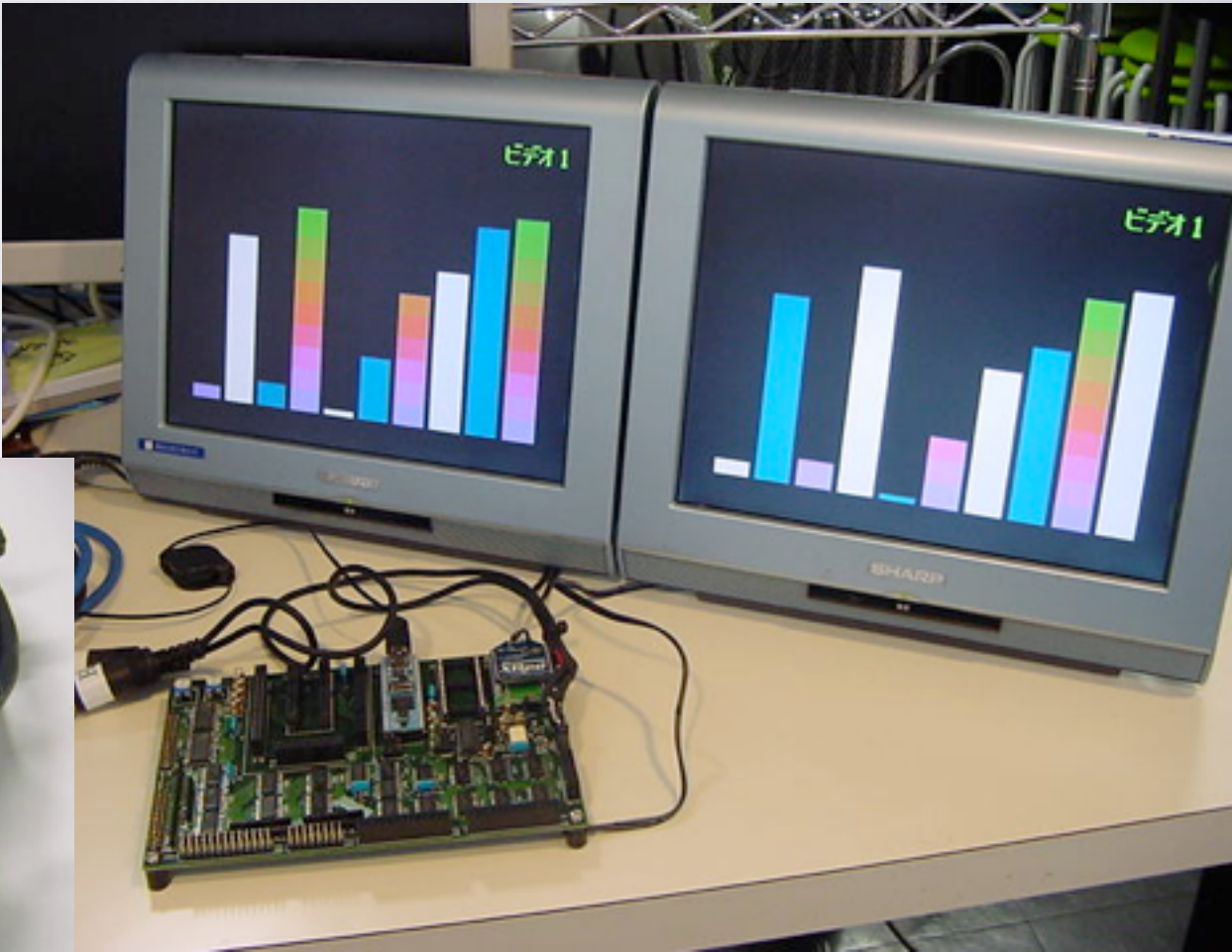


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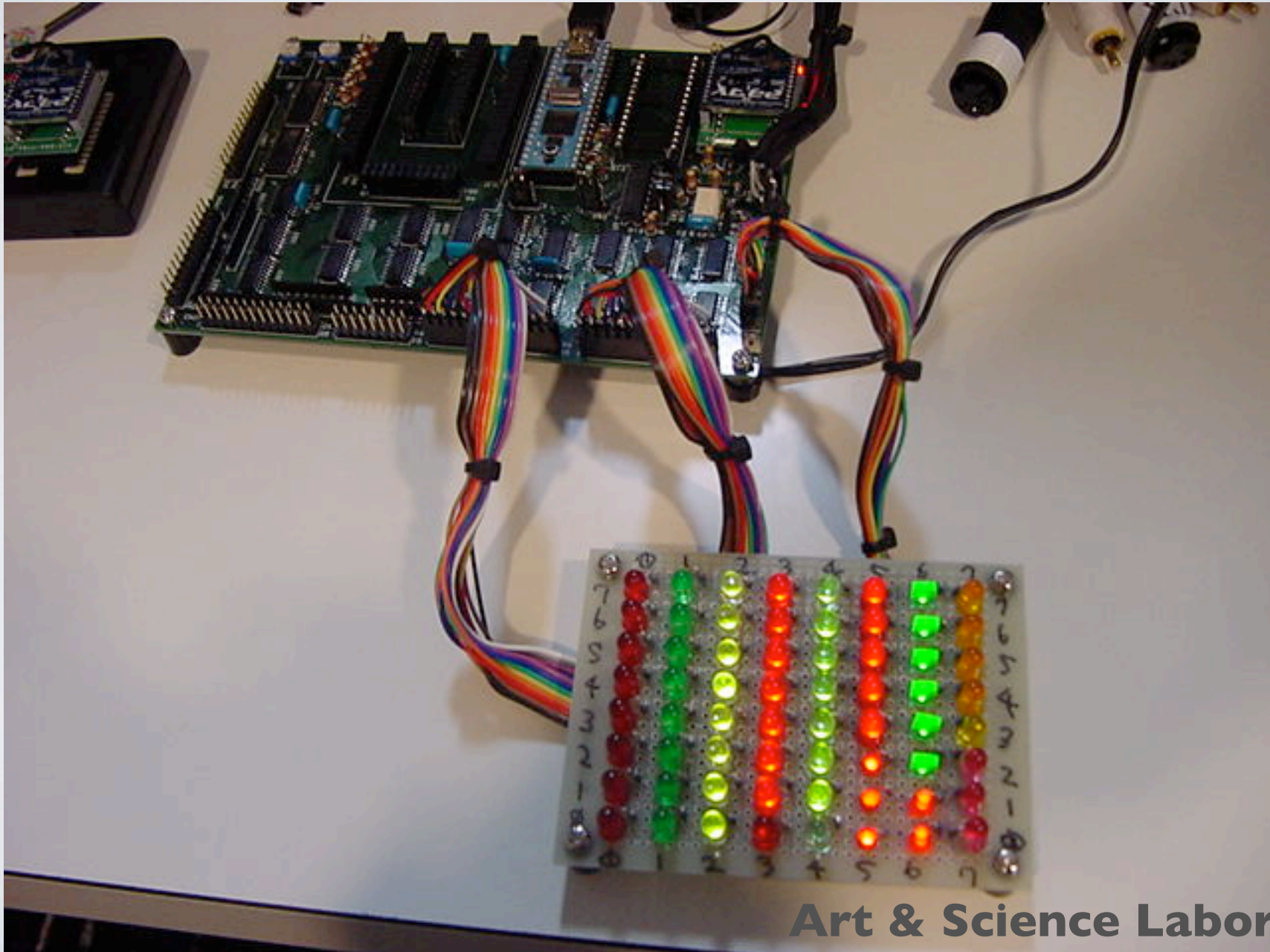




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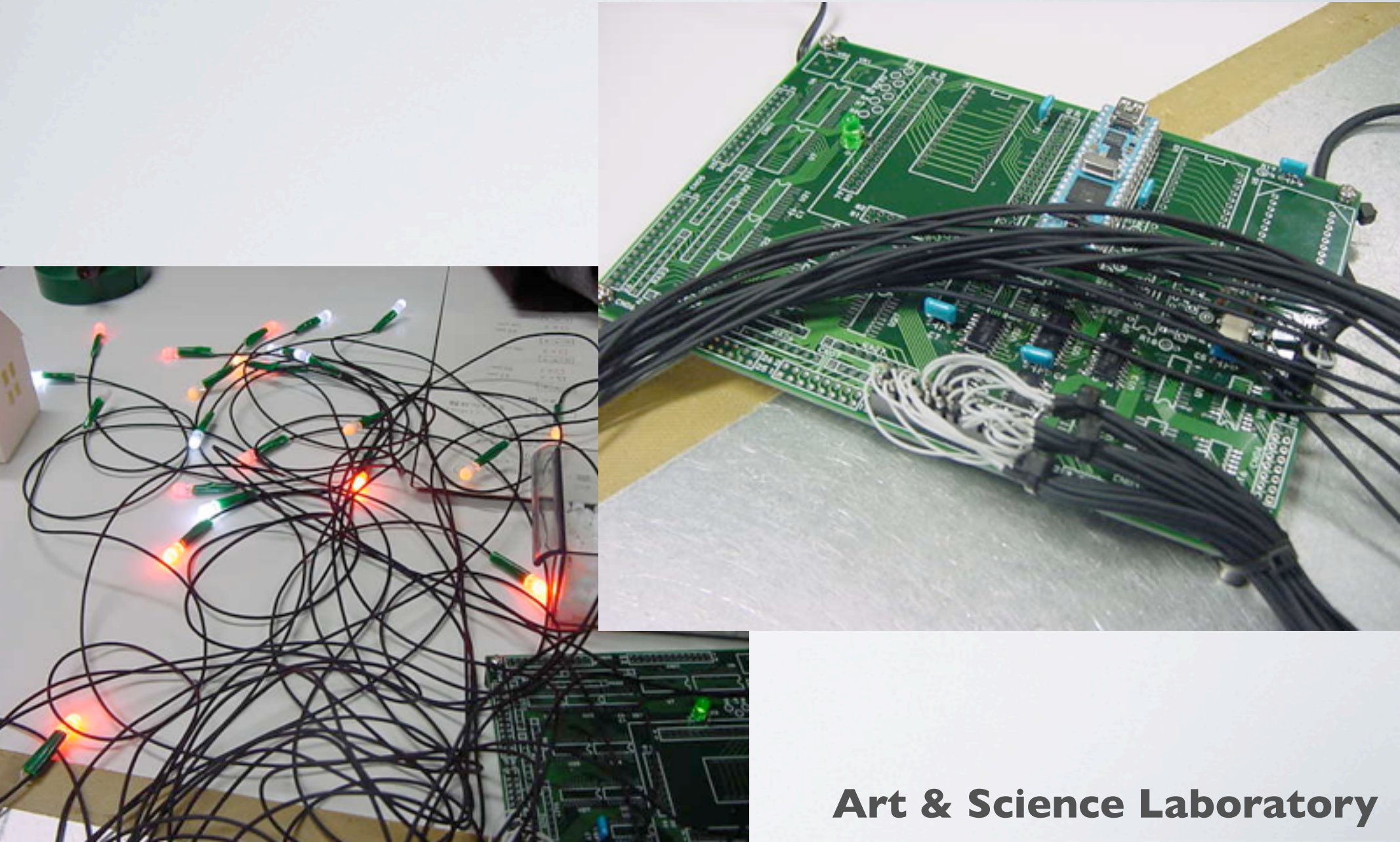


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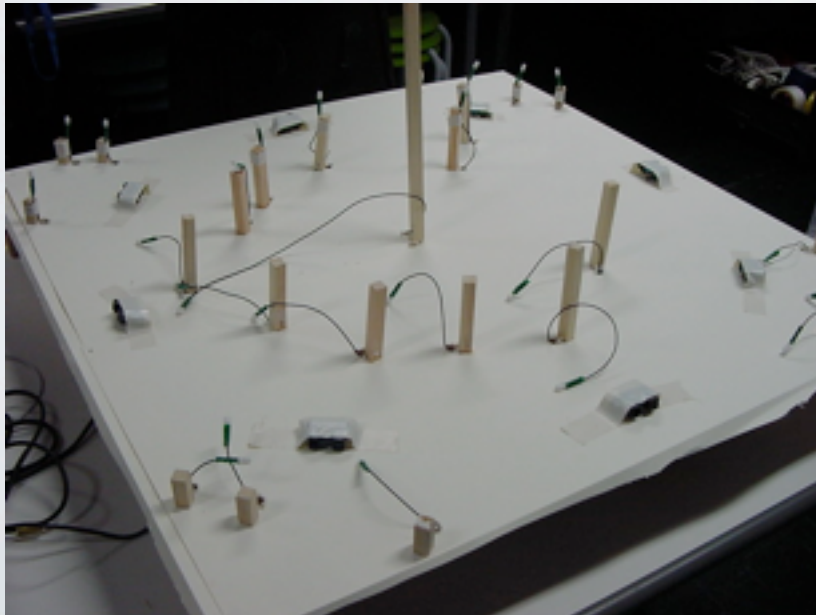
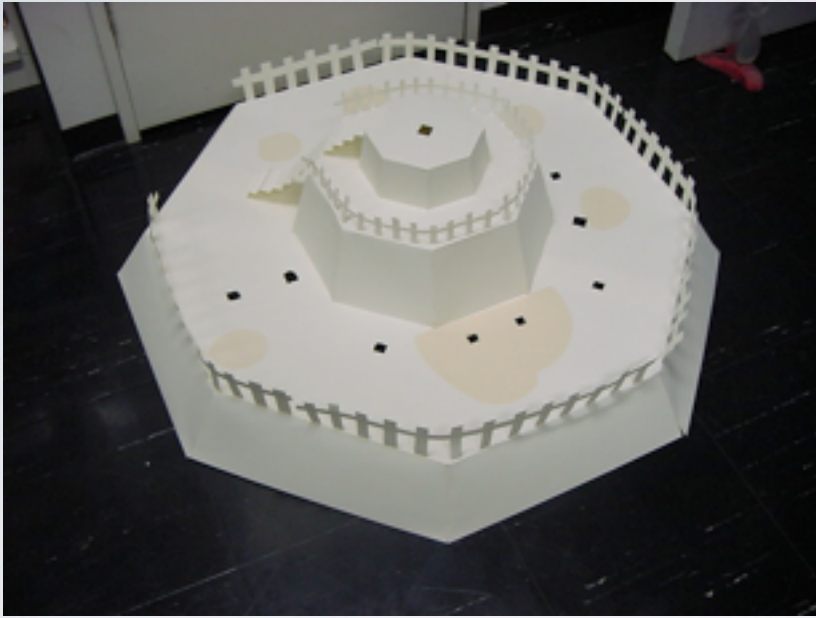


# Example Application - Student's Work





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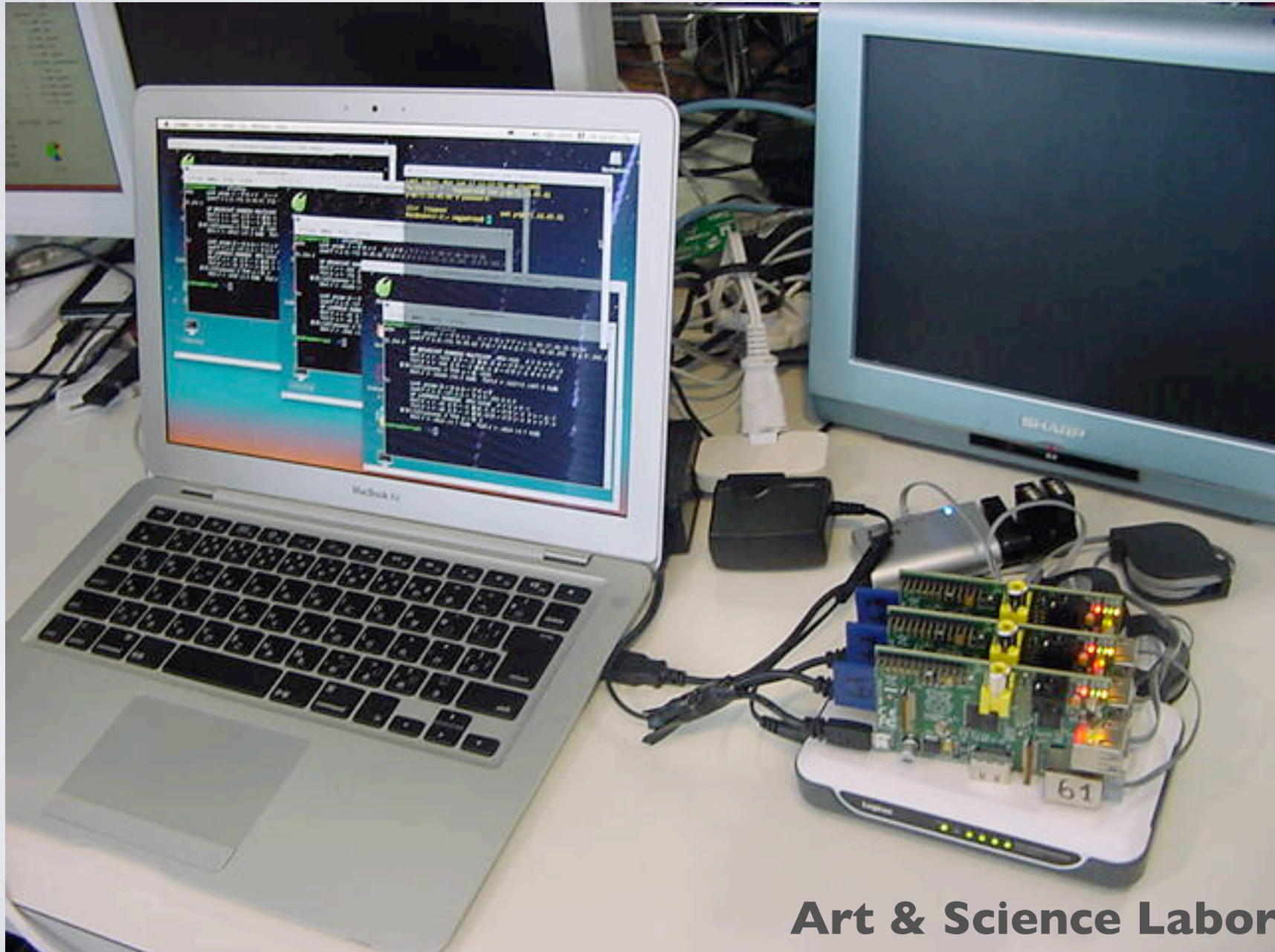






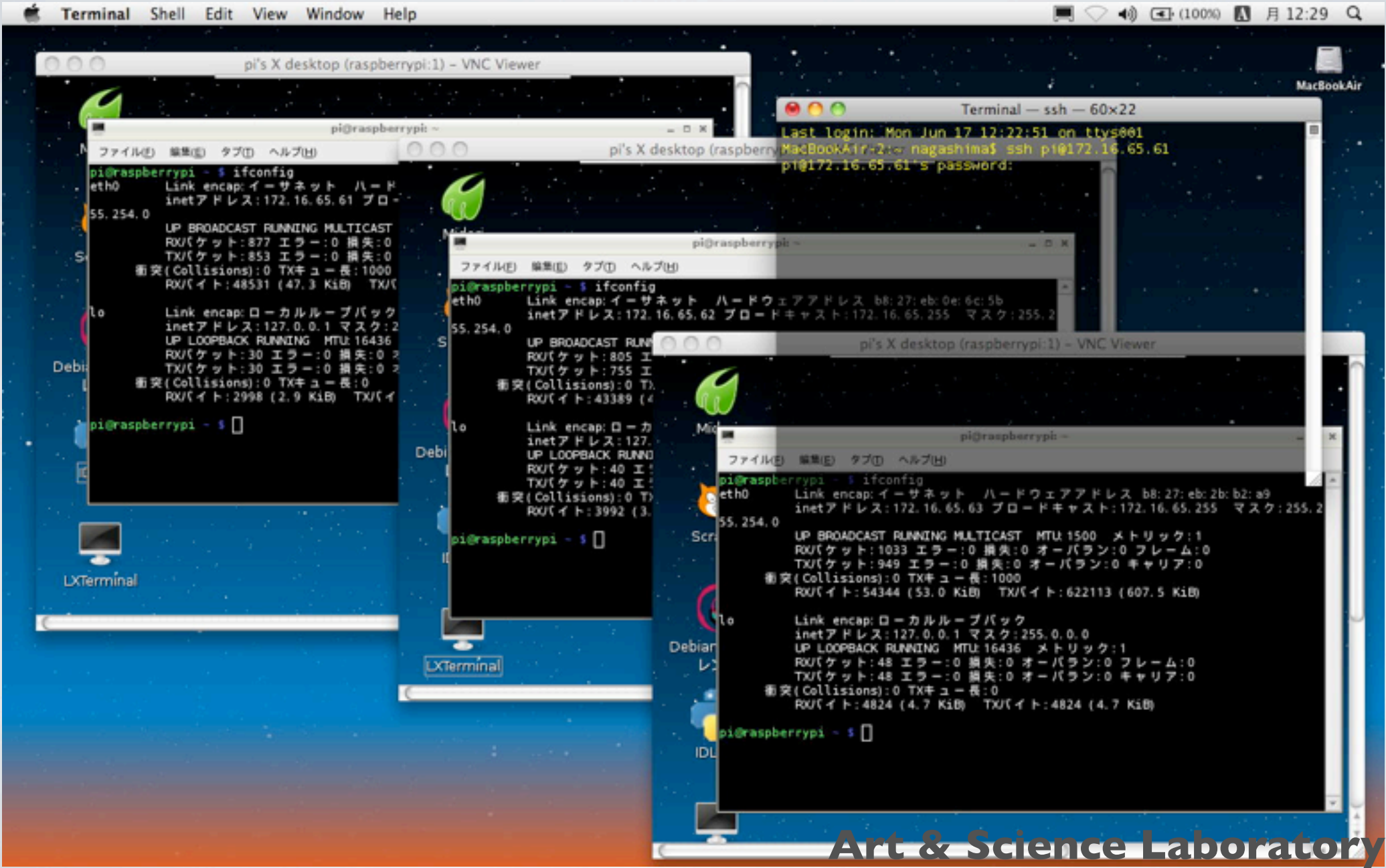


# SUAC board + Raspberry Pi



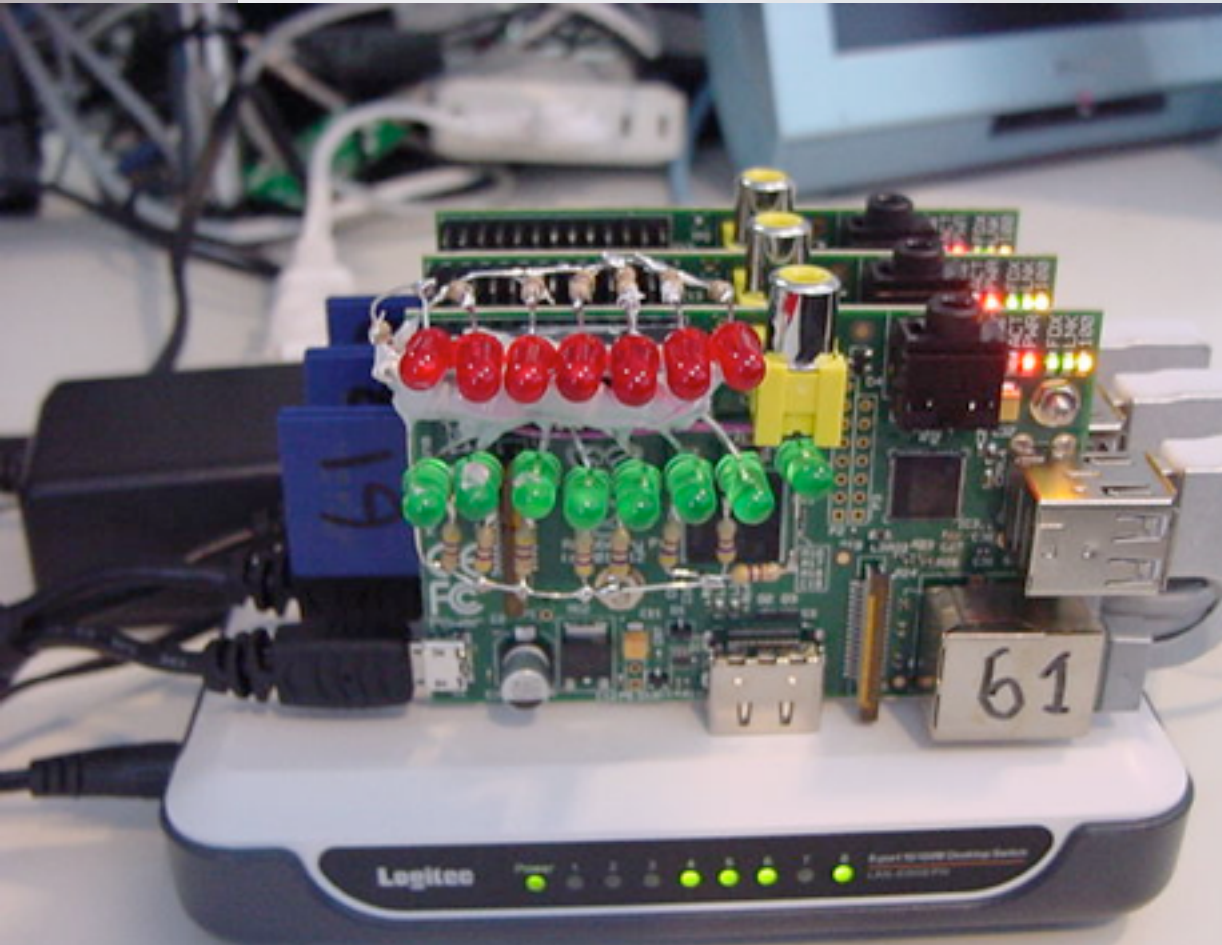
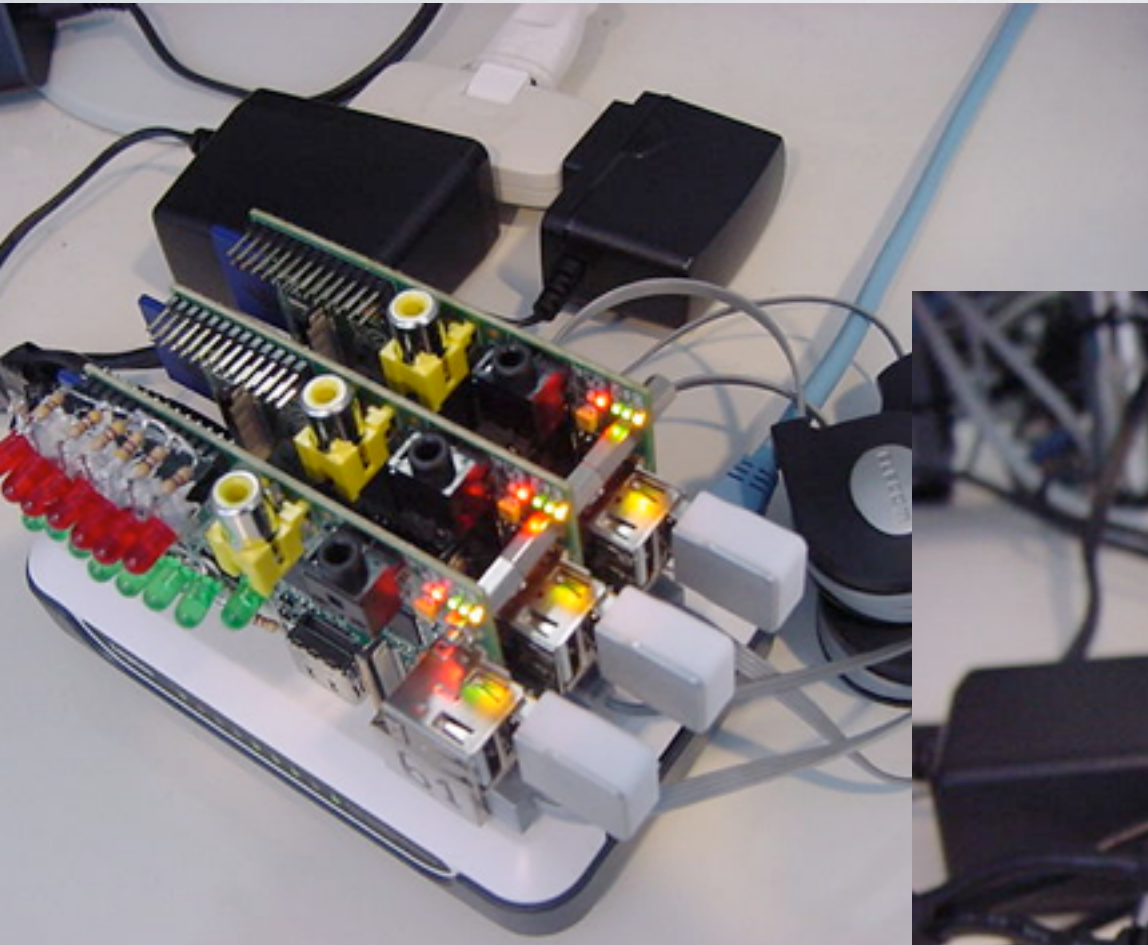


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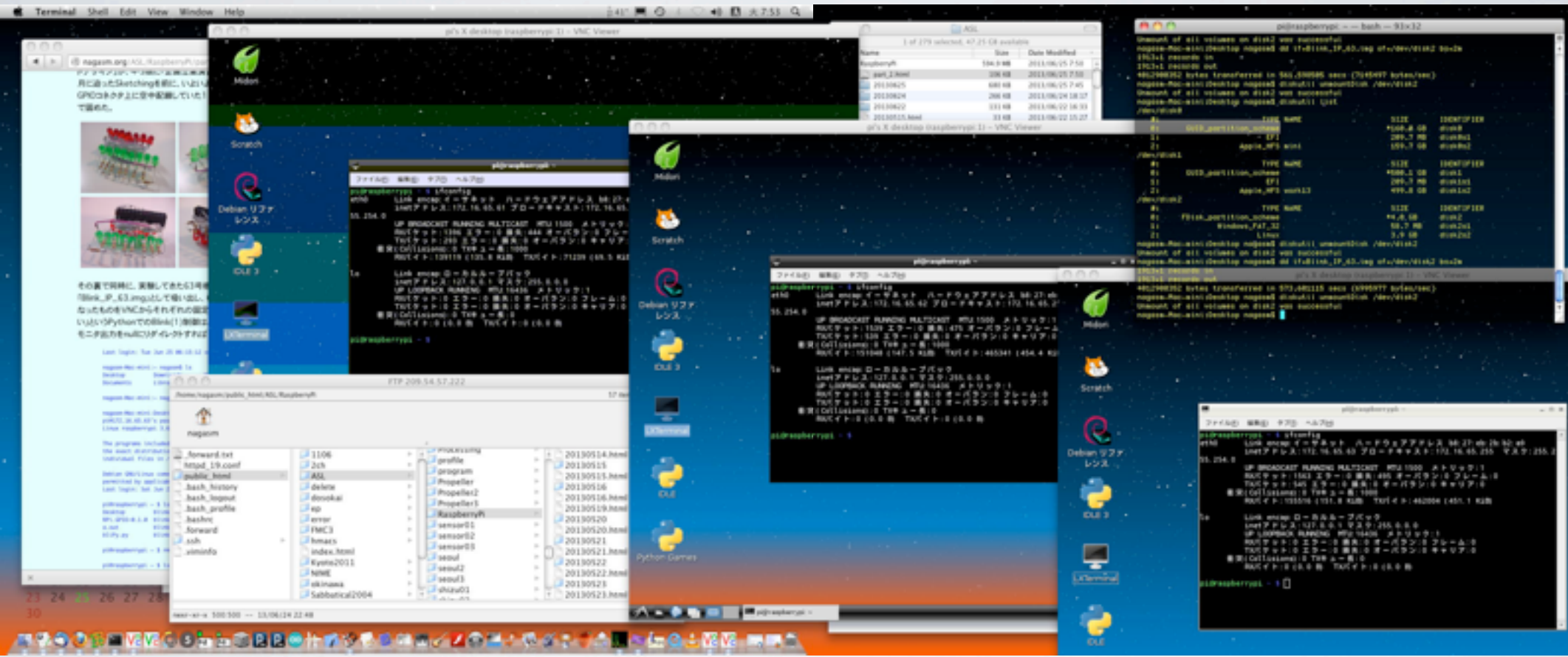
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# SUAC board + Raspberry Pi

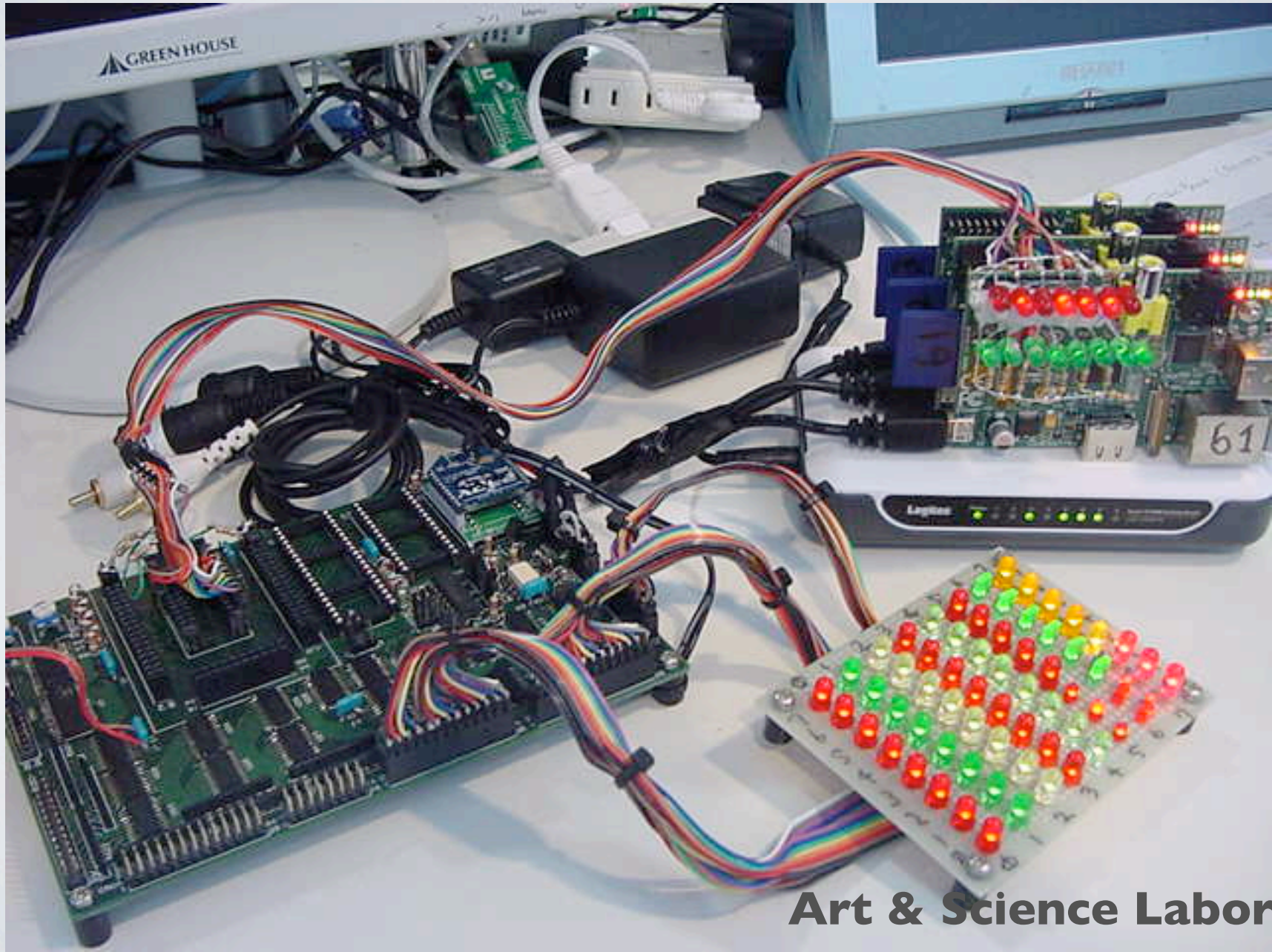




# SUAC board + Raspberry Pi

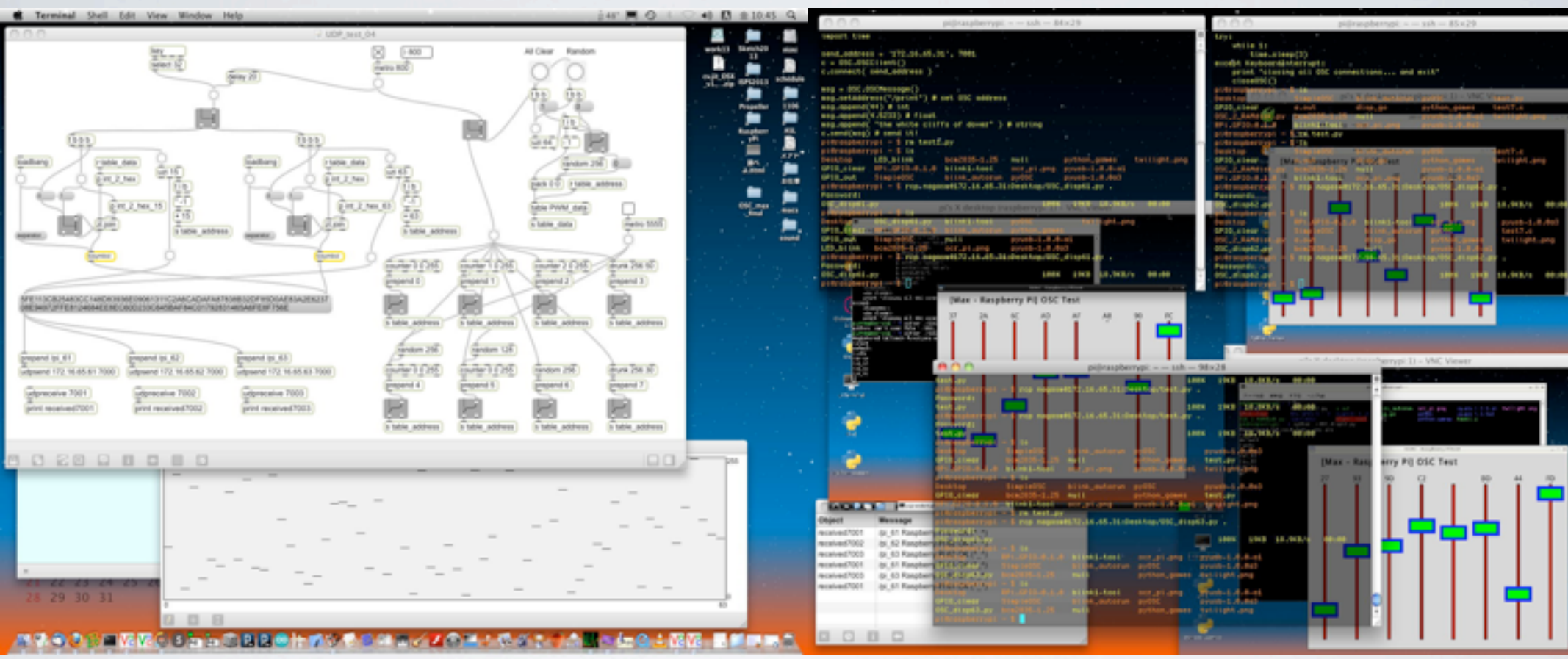


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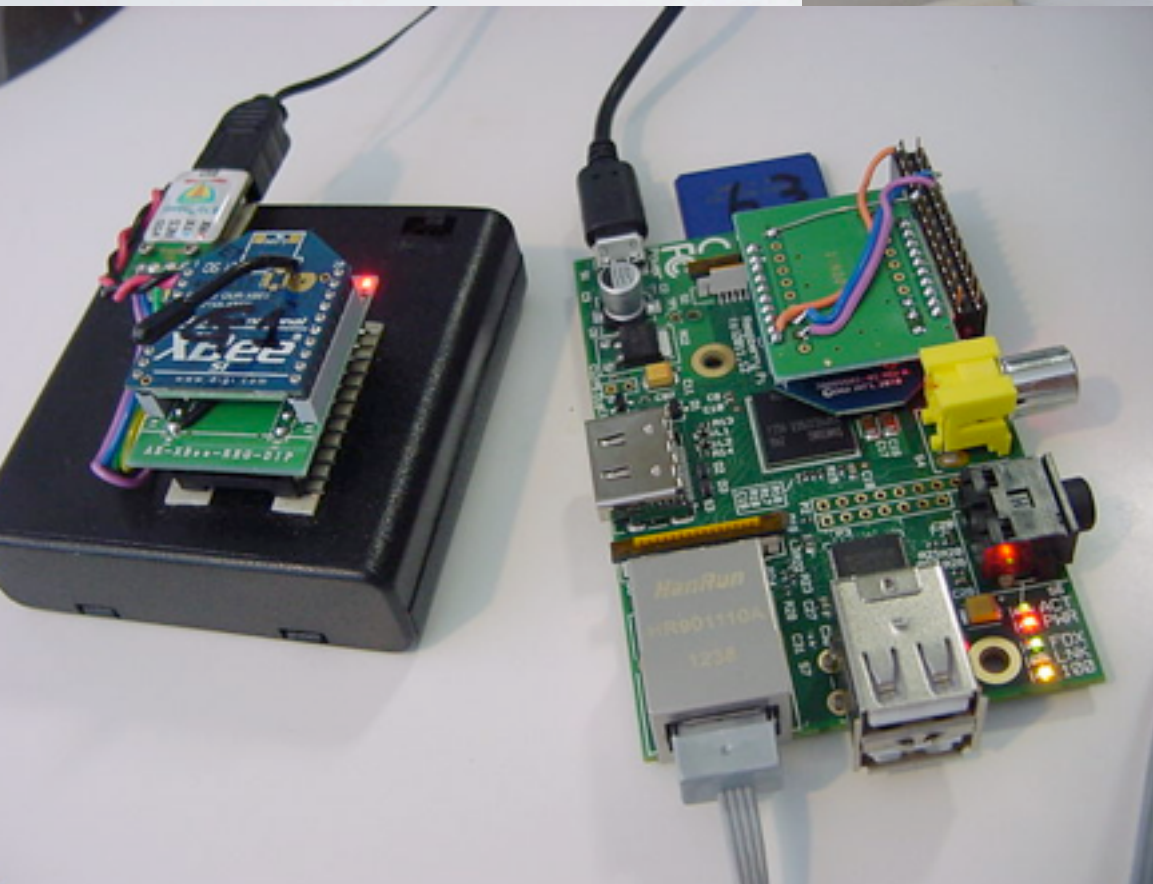


# SUAC board + Raspberry Pi



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# SUAC board + Raspberry Pi



**Art & Science Laboratory**



That's all, thank you.