

# Fault Tolerance and Dependability

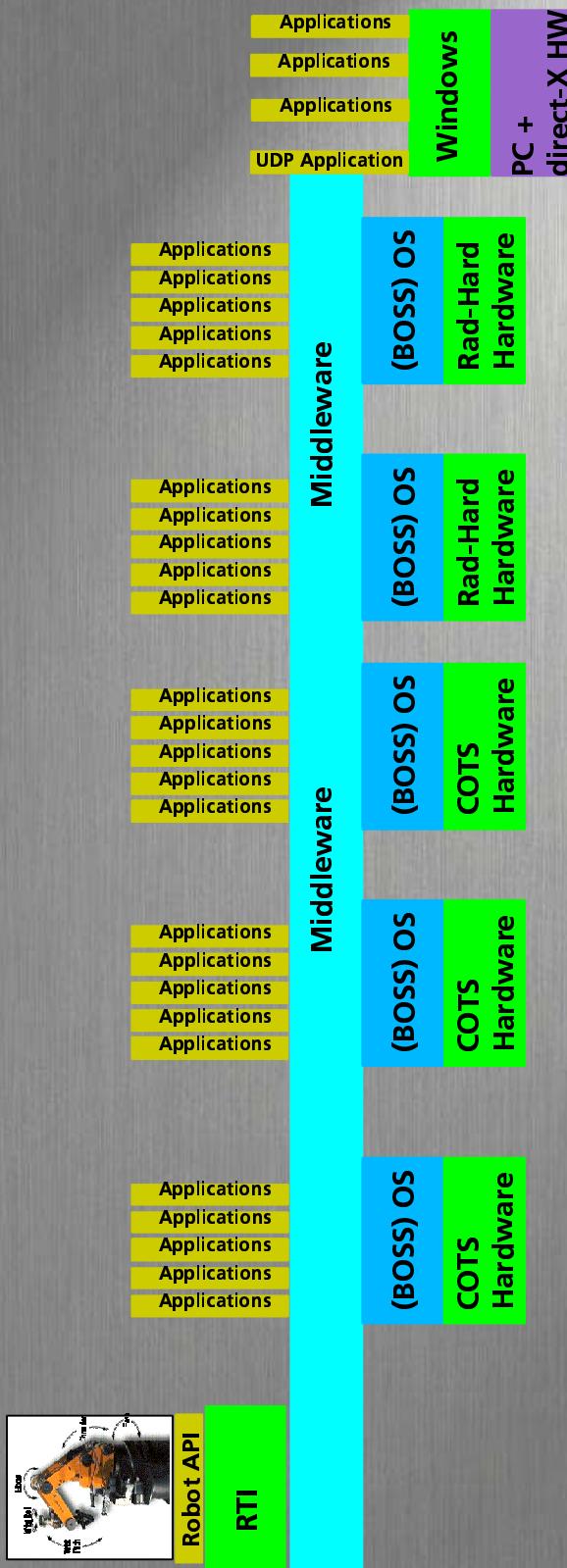
## Beispiele



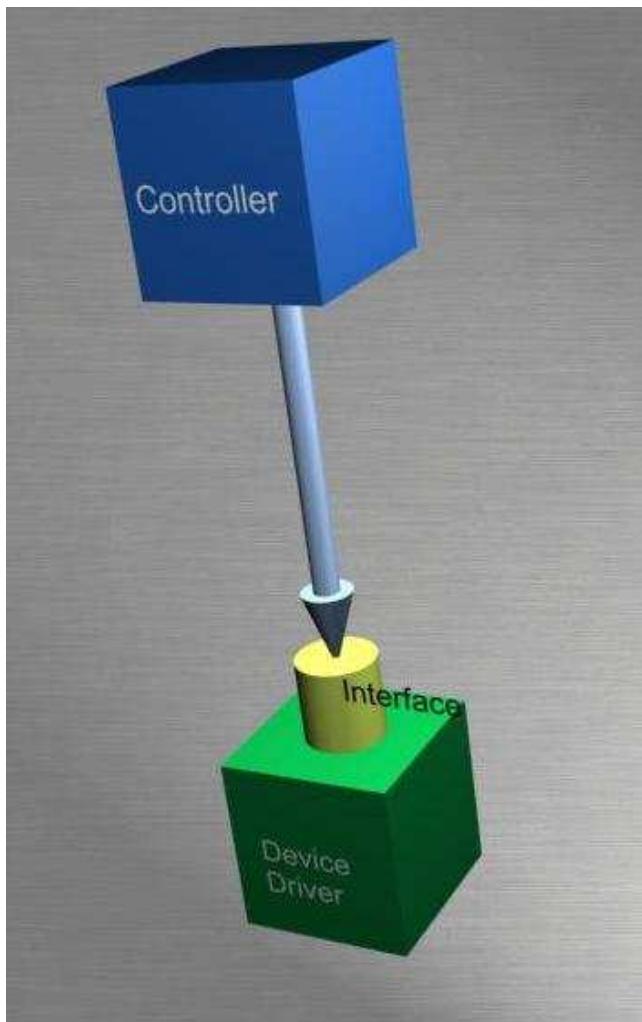
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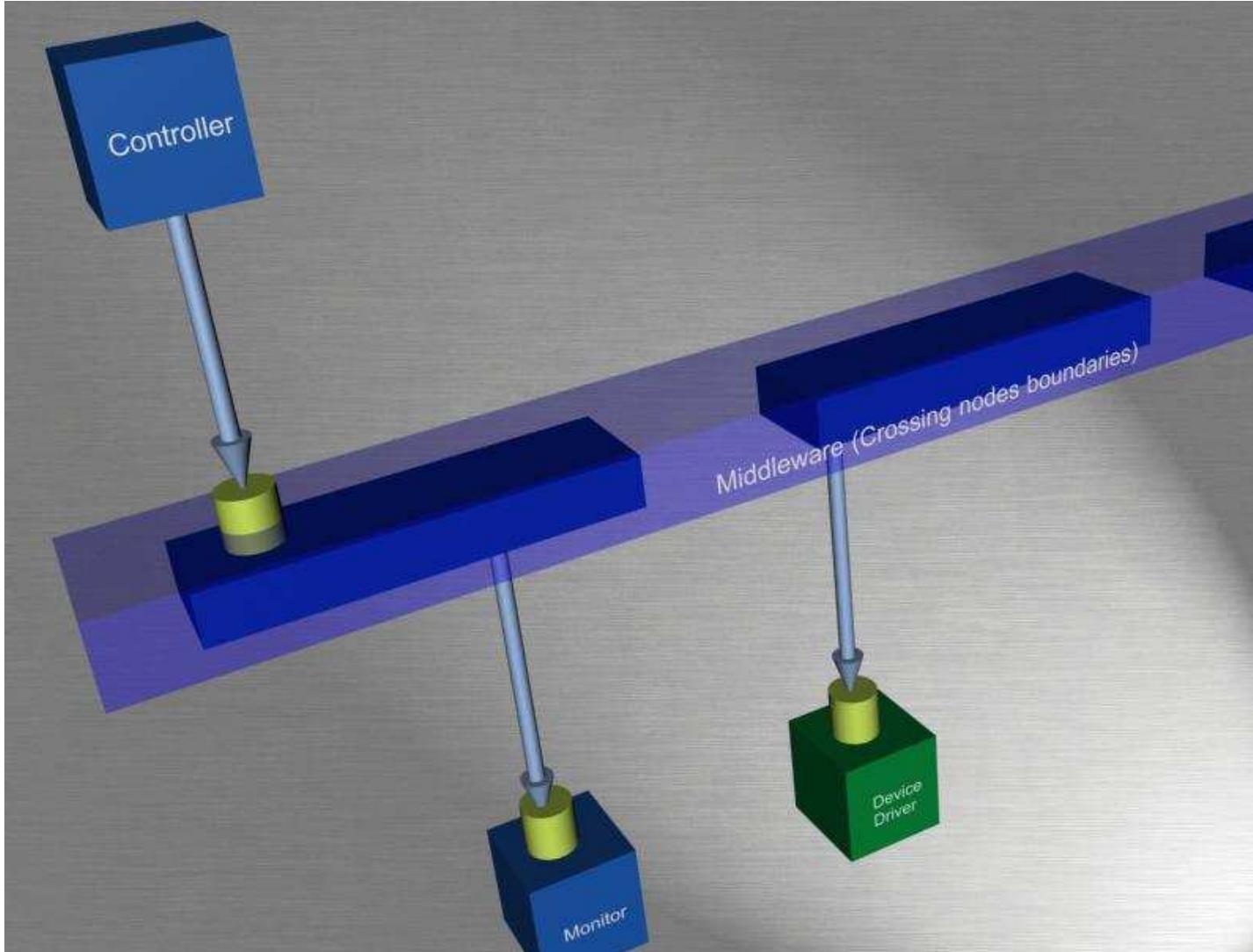
# Middleware connecting every thing together



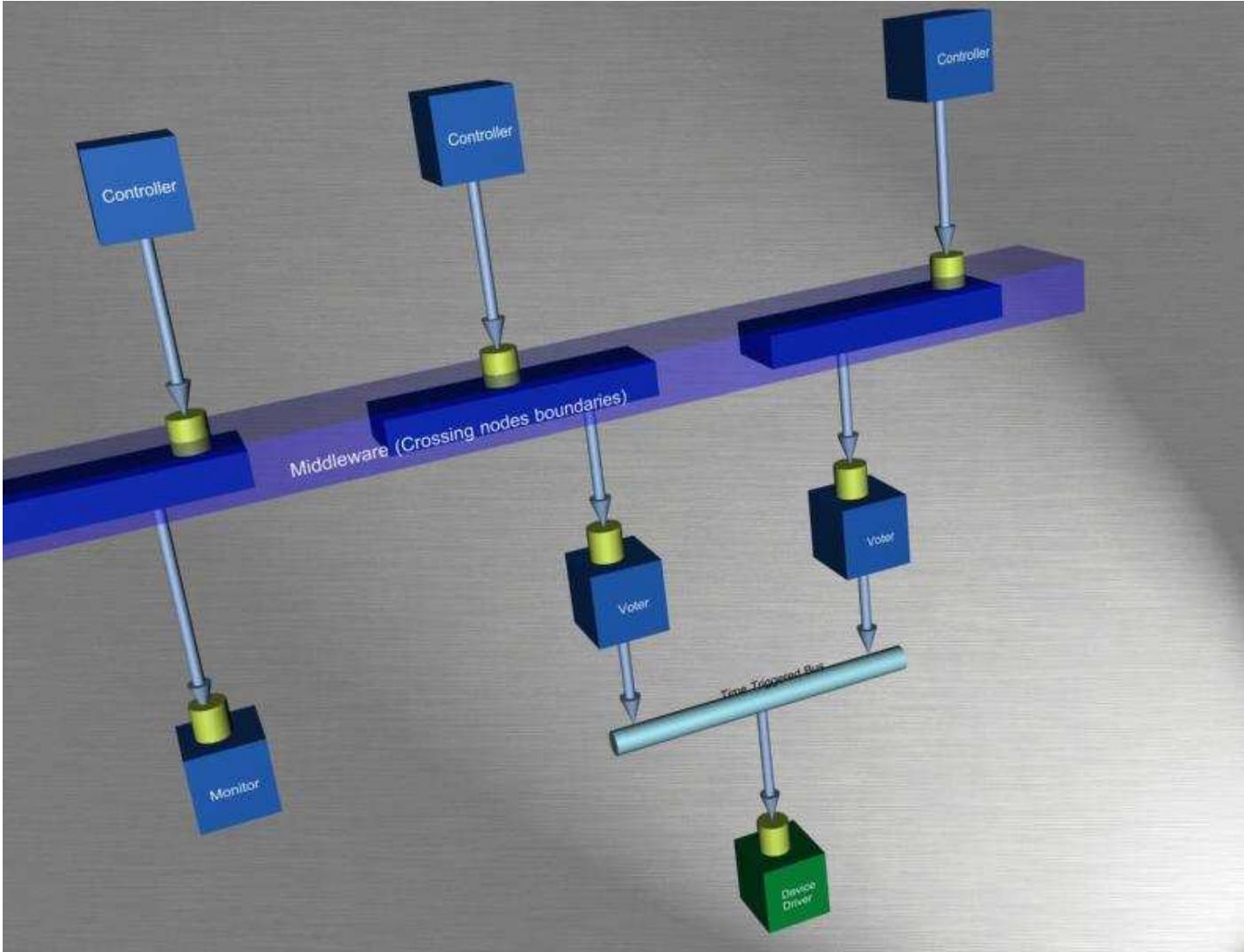
# Middleware insertion



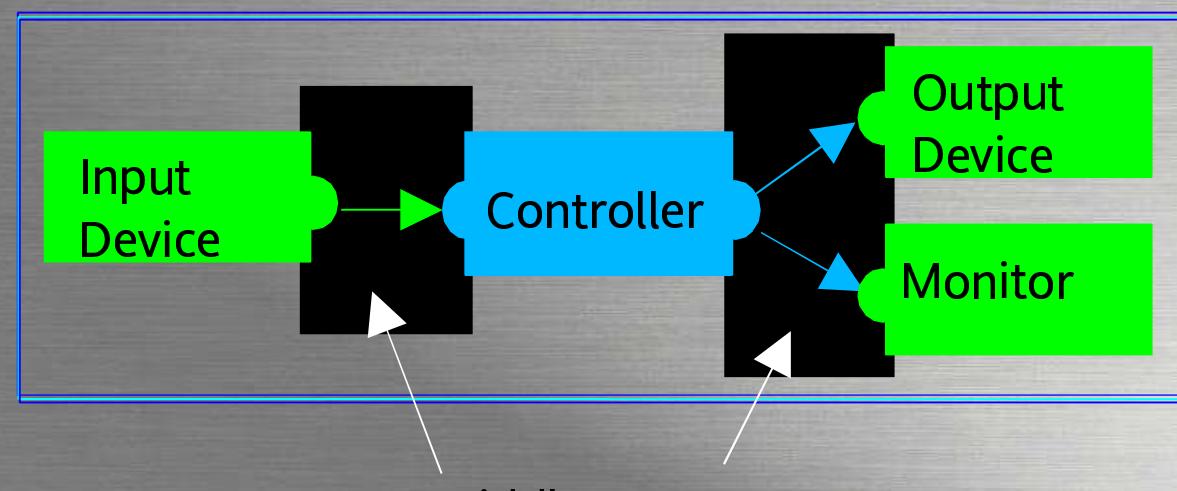
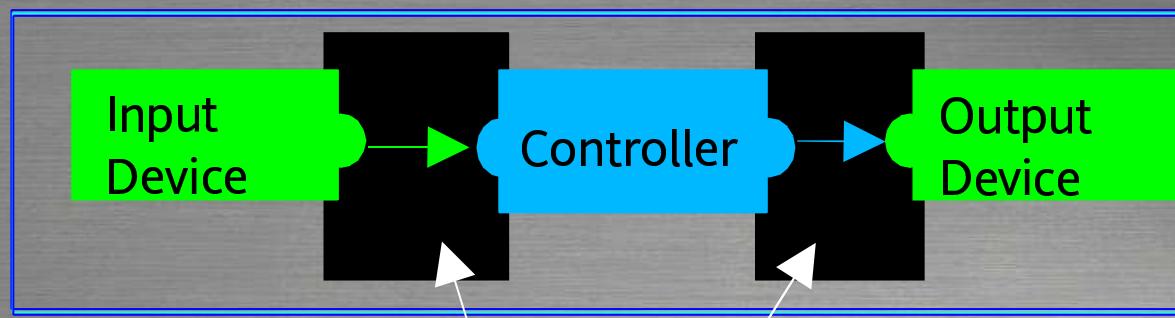
# Middleware insertion

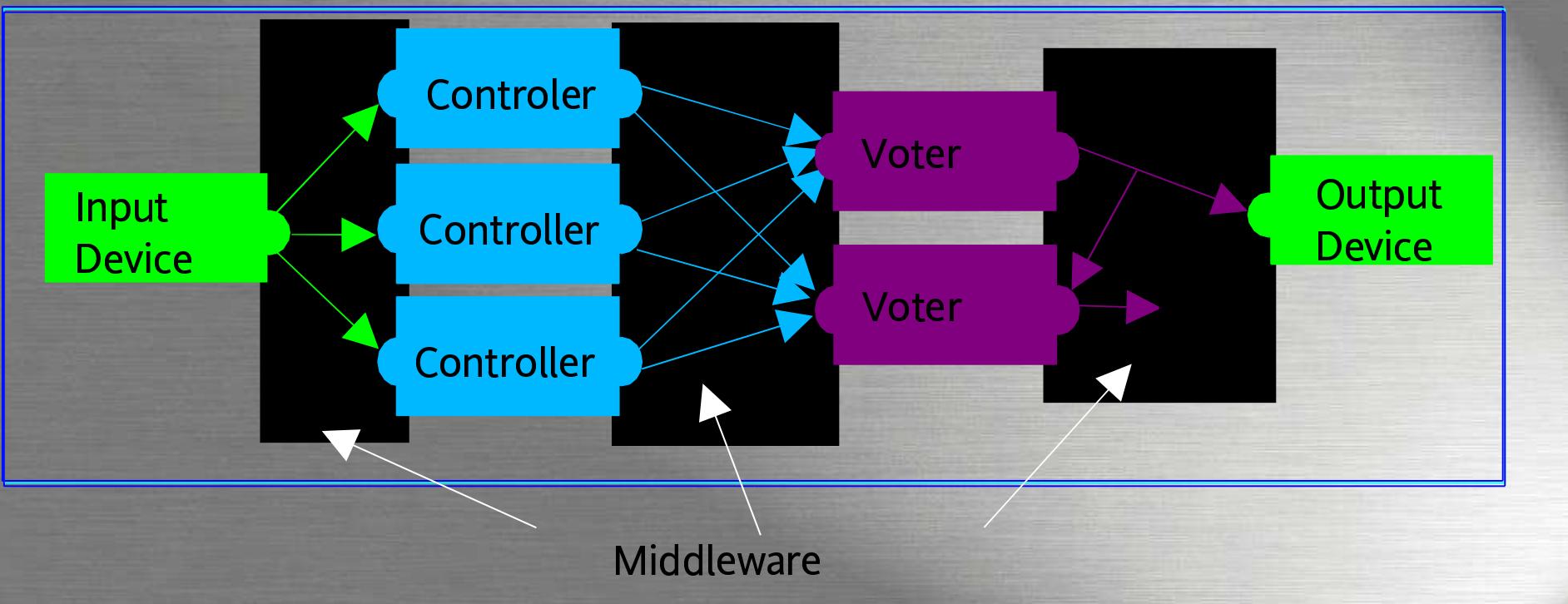
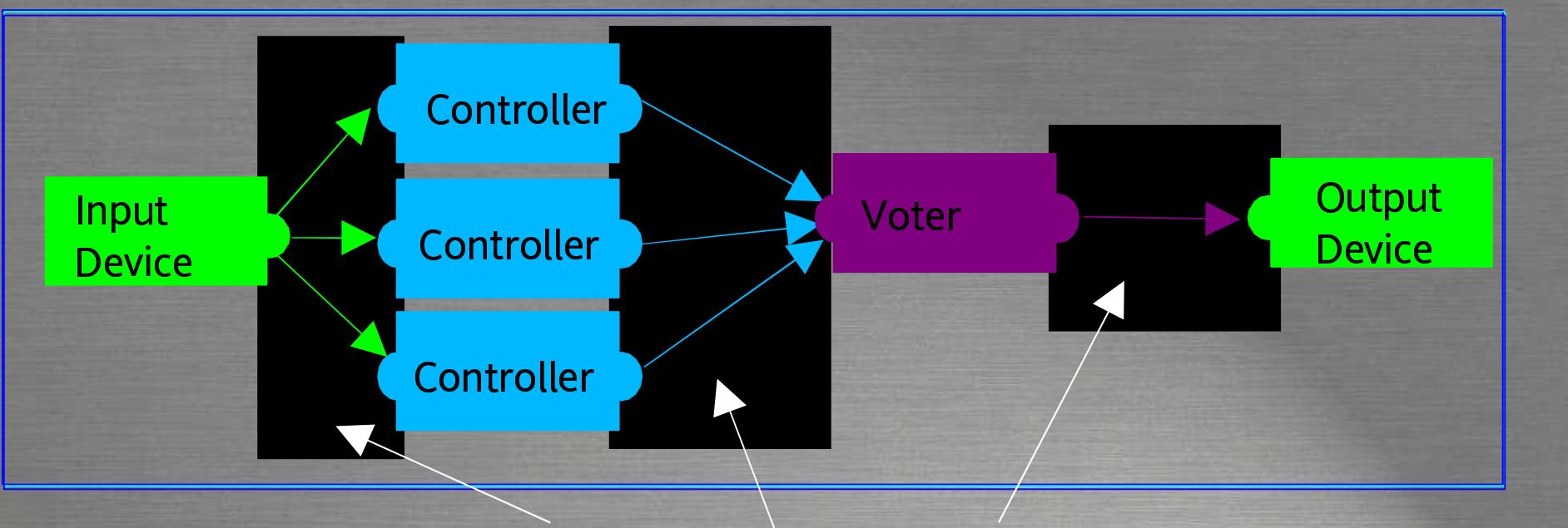


# Middleware insertion

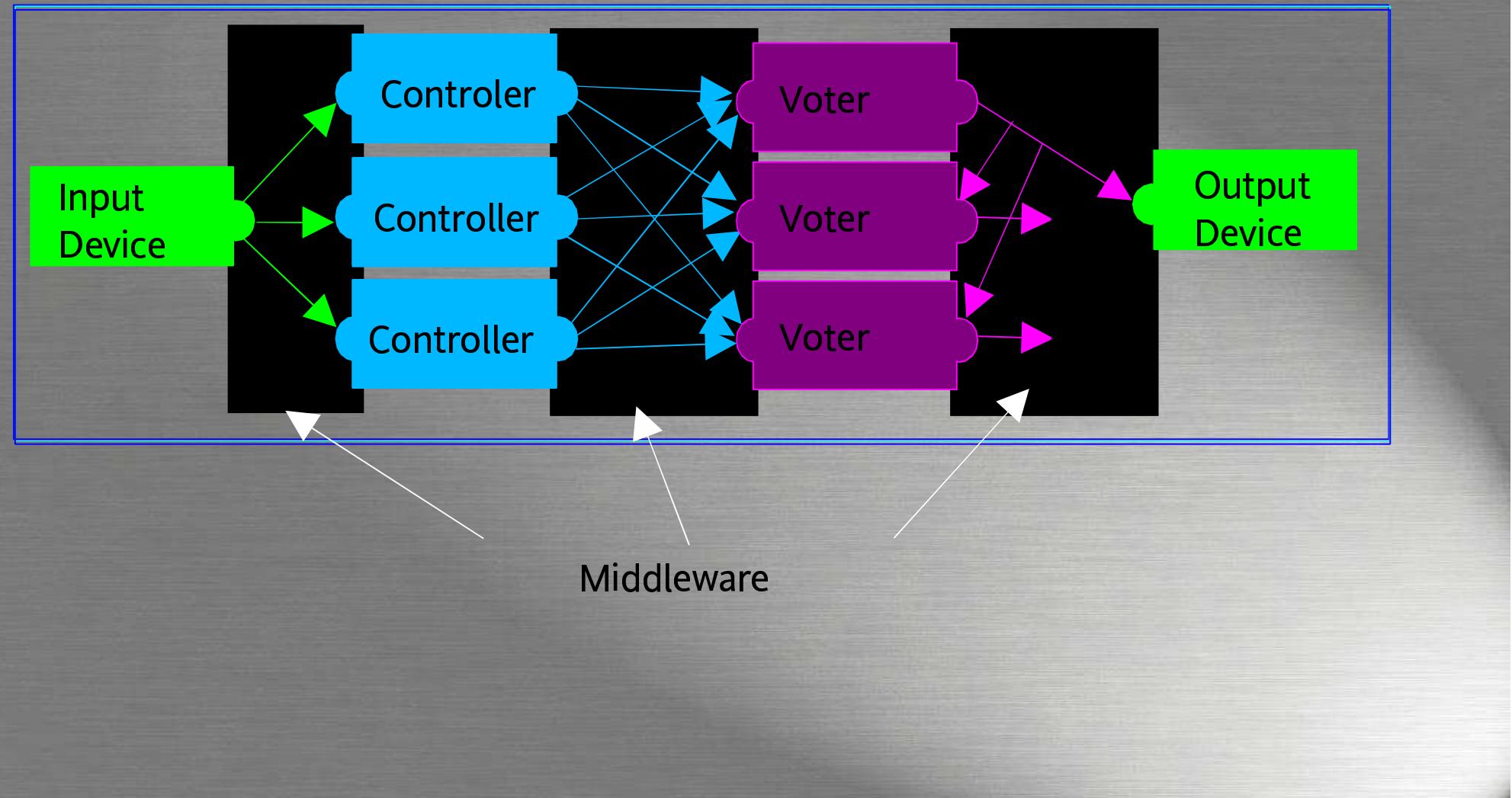


# Middleware insertion

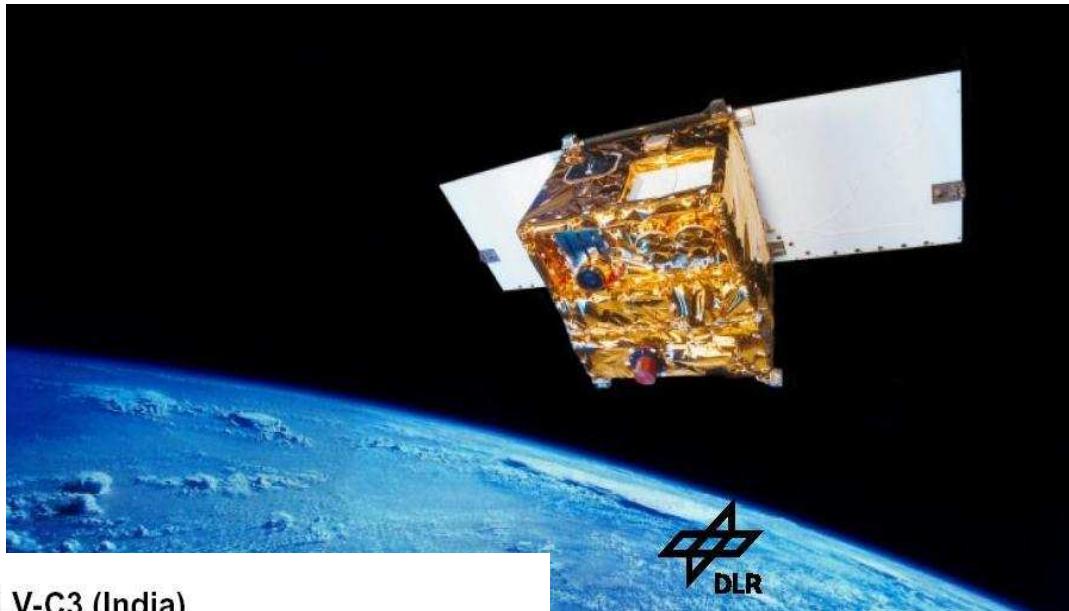




# Middleware insertion



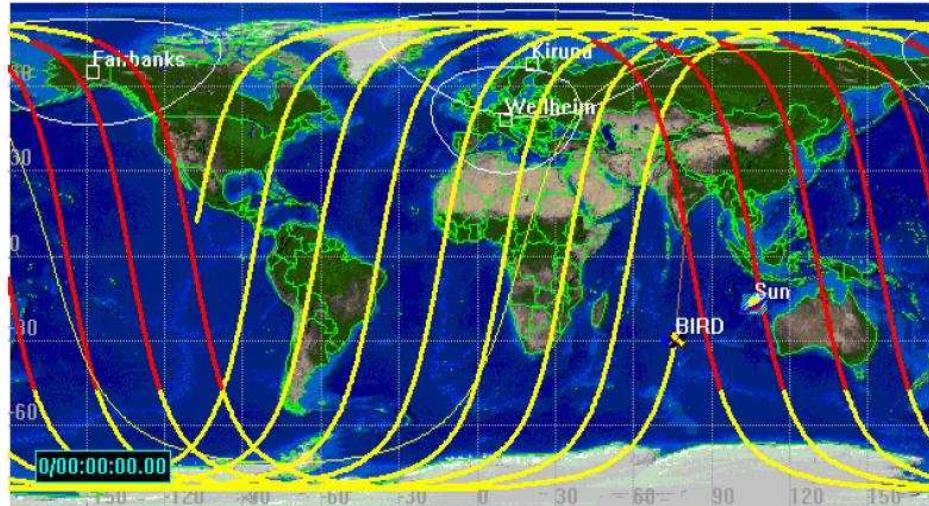
# BIRD



Launcher: PSLV-C3 (India)

Launcher payloads: TES (ISRO), PROBA (ESA), BIRD (DLR)

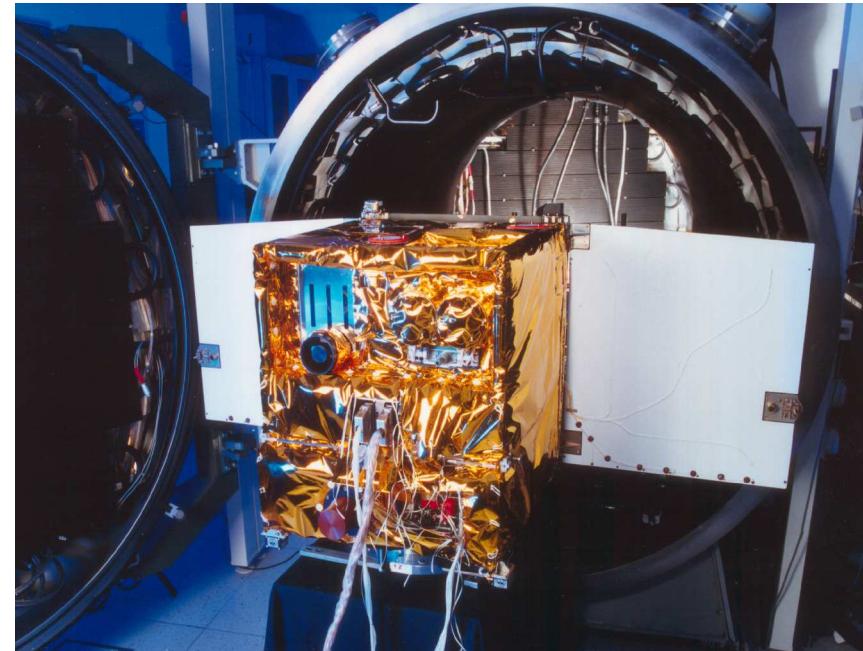
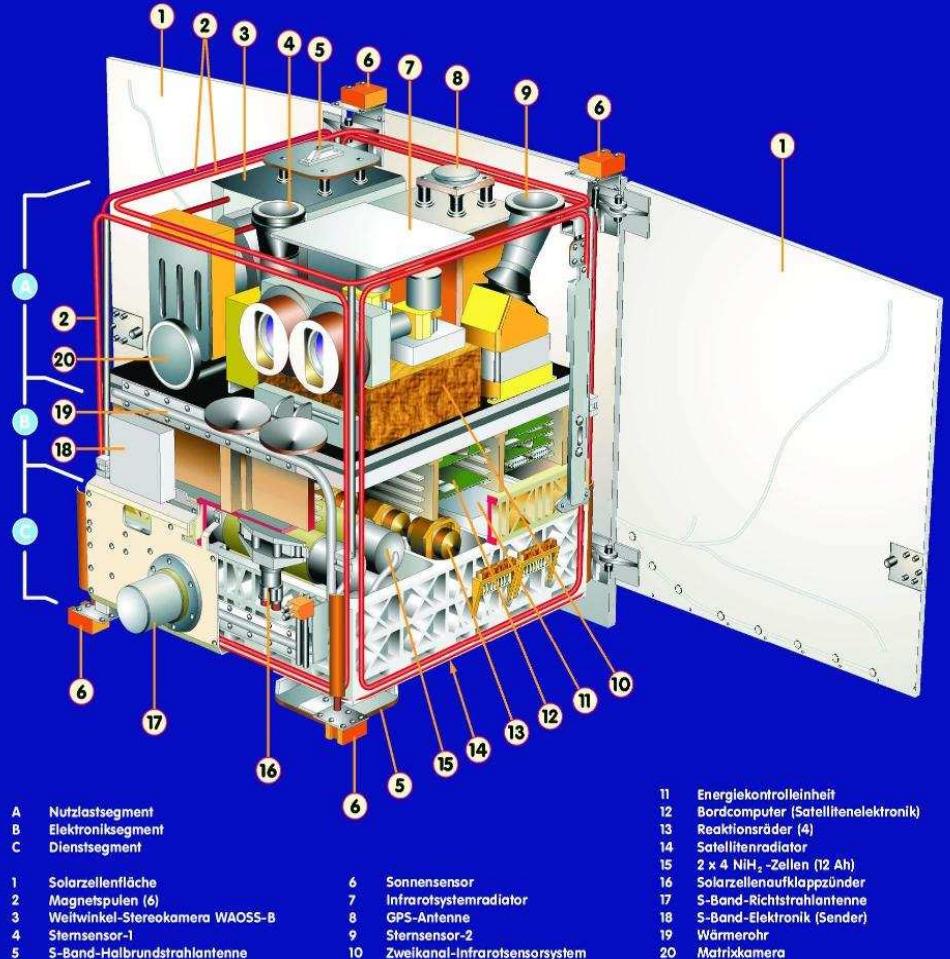
BIRD Orbit: 568km circ.,  $i = 97.8$  (sun-synchronous)



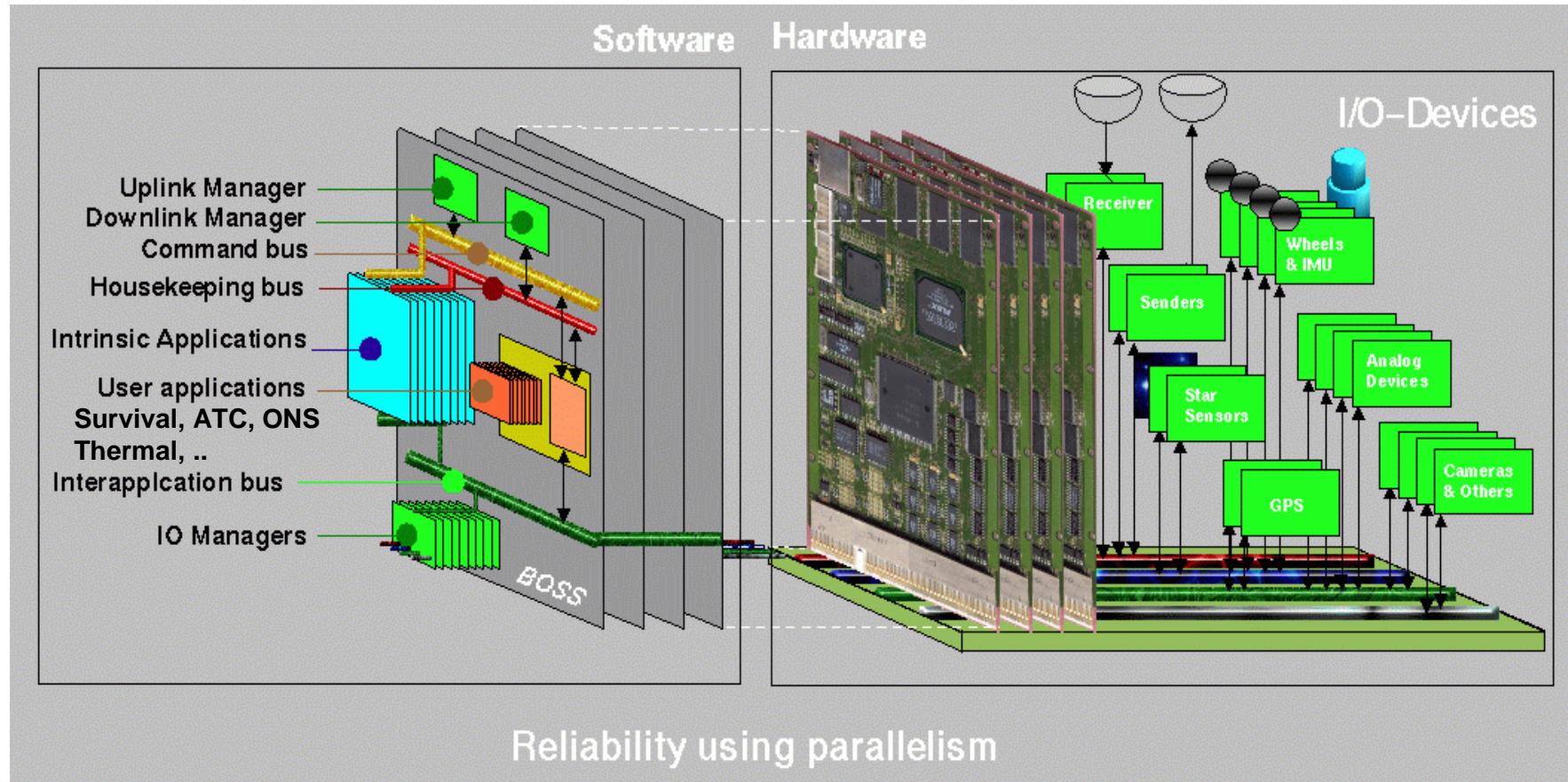
# BIRD

BIRD-Satellit (BIRD : Bi-spectral InfraRed Detection)

RCGRAFIK



# BIRD Software und Hardware



# **BIRD geht in Serienproduktion....**

**BIRD geht in Serienproduktion.  
Die Studie läuft...**



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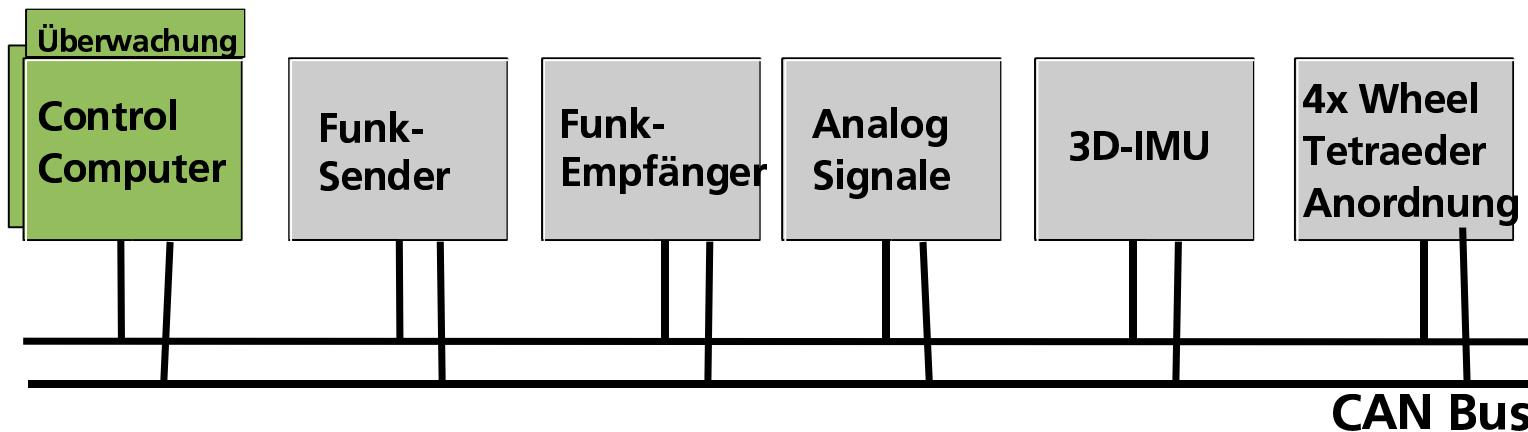
# From Microwheel to CUBESAT



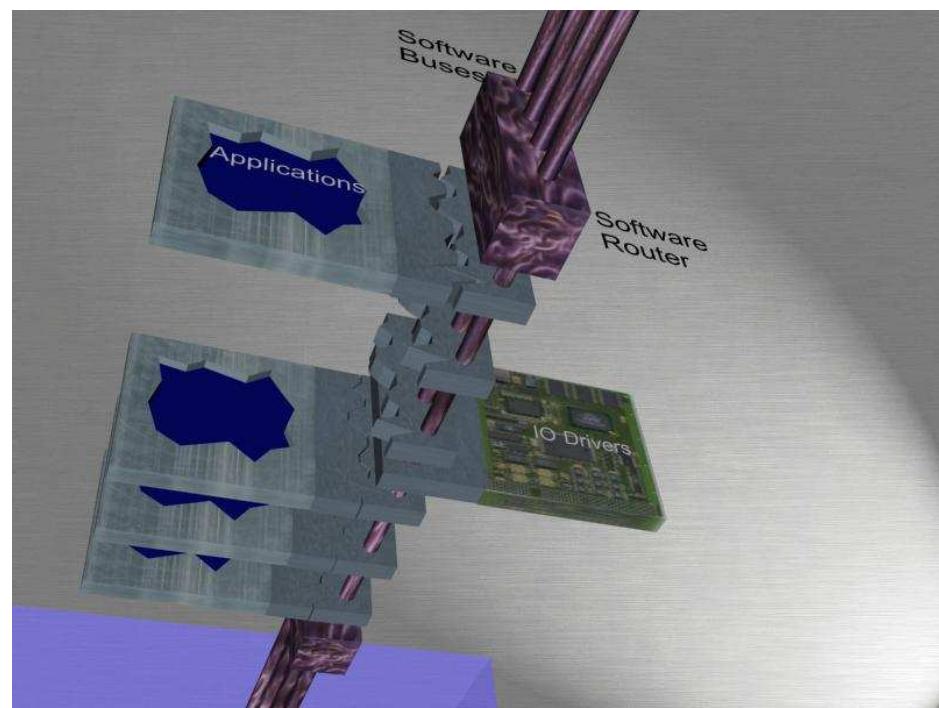
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# Cube-Sat: Struktur

## Hardware

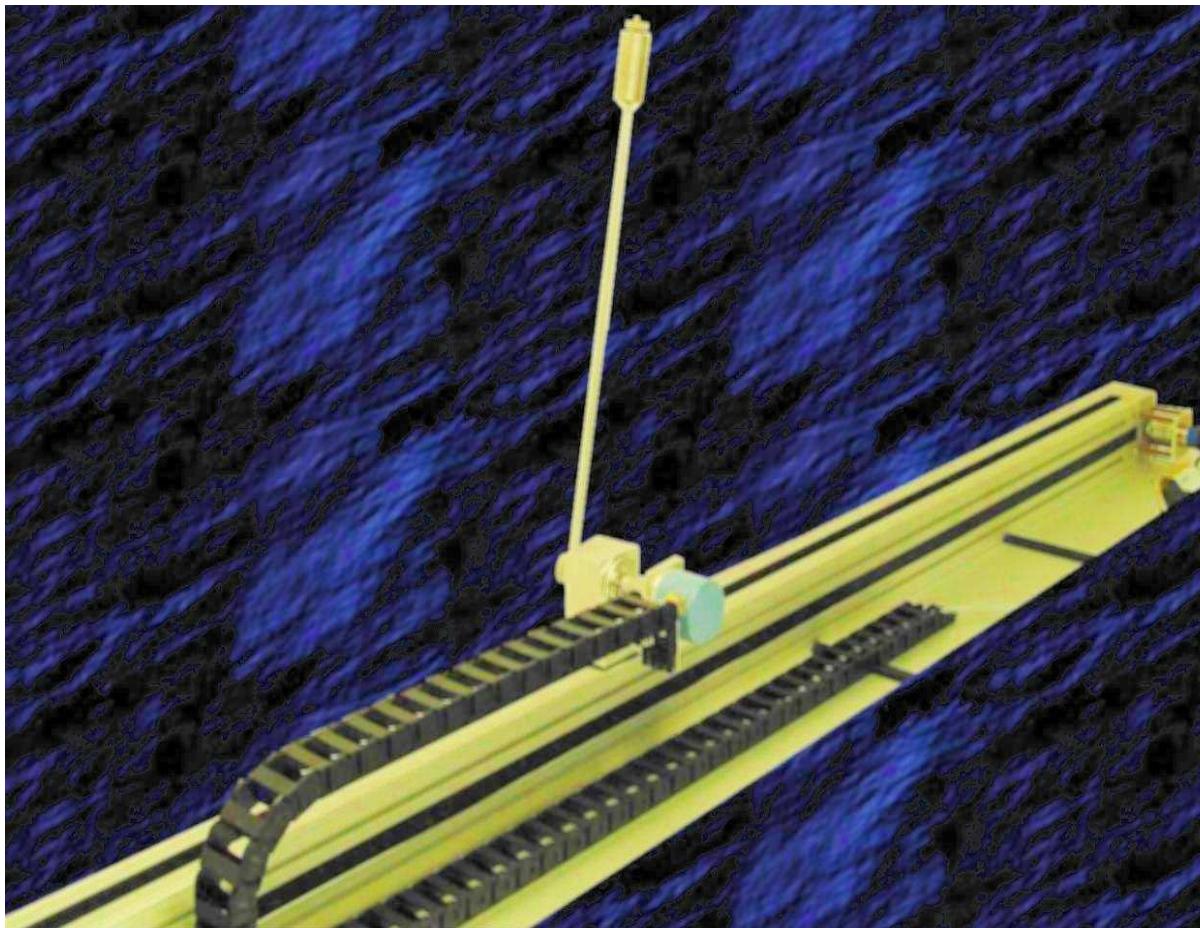


CAN Bus



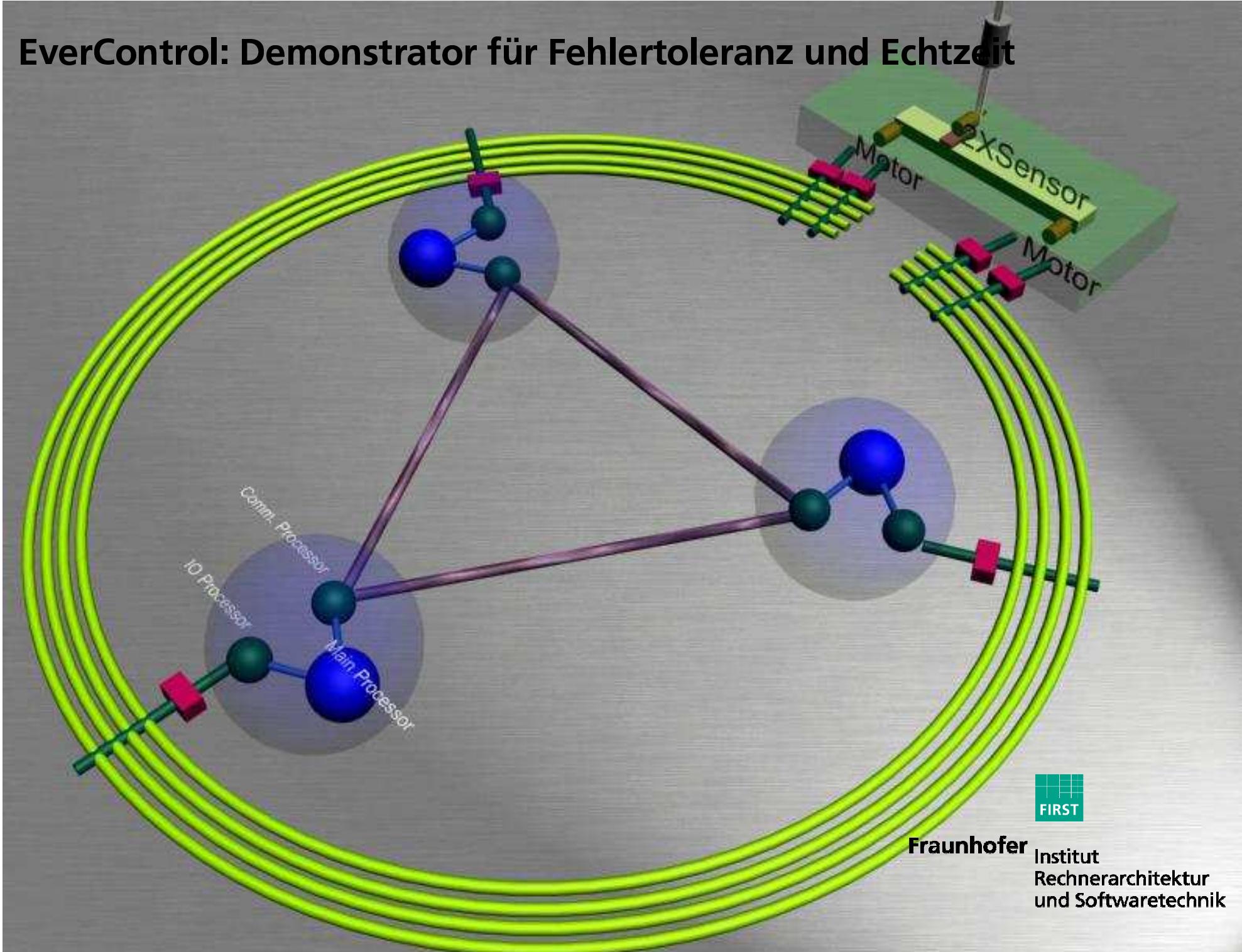
## Software

# EverControl: Demonstrator für Fehlertoleranz und Echtzeit

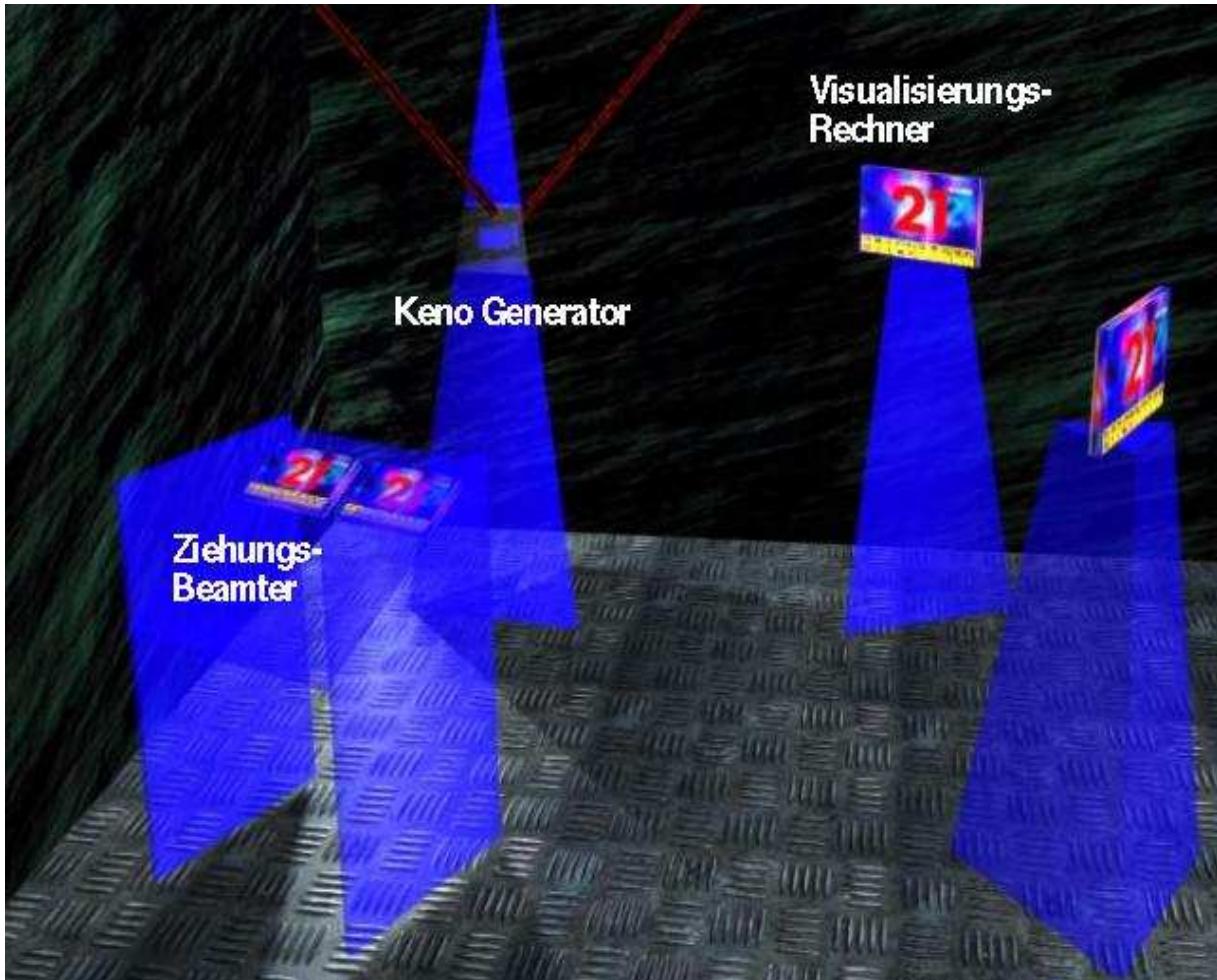


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# EverControl: Demonstrator für Fehlertoleranz und Echtzeit

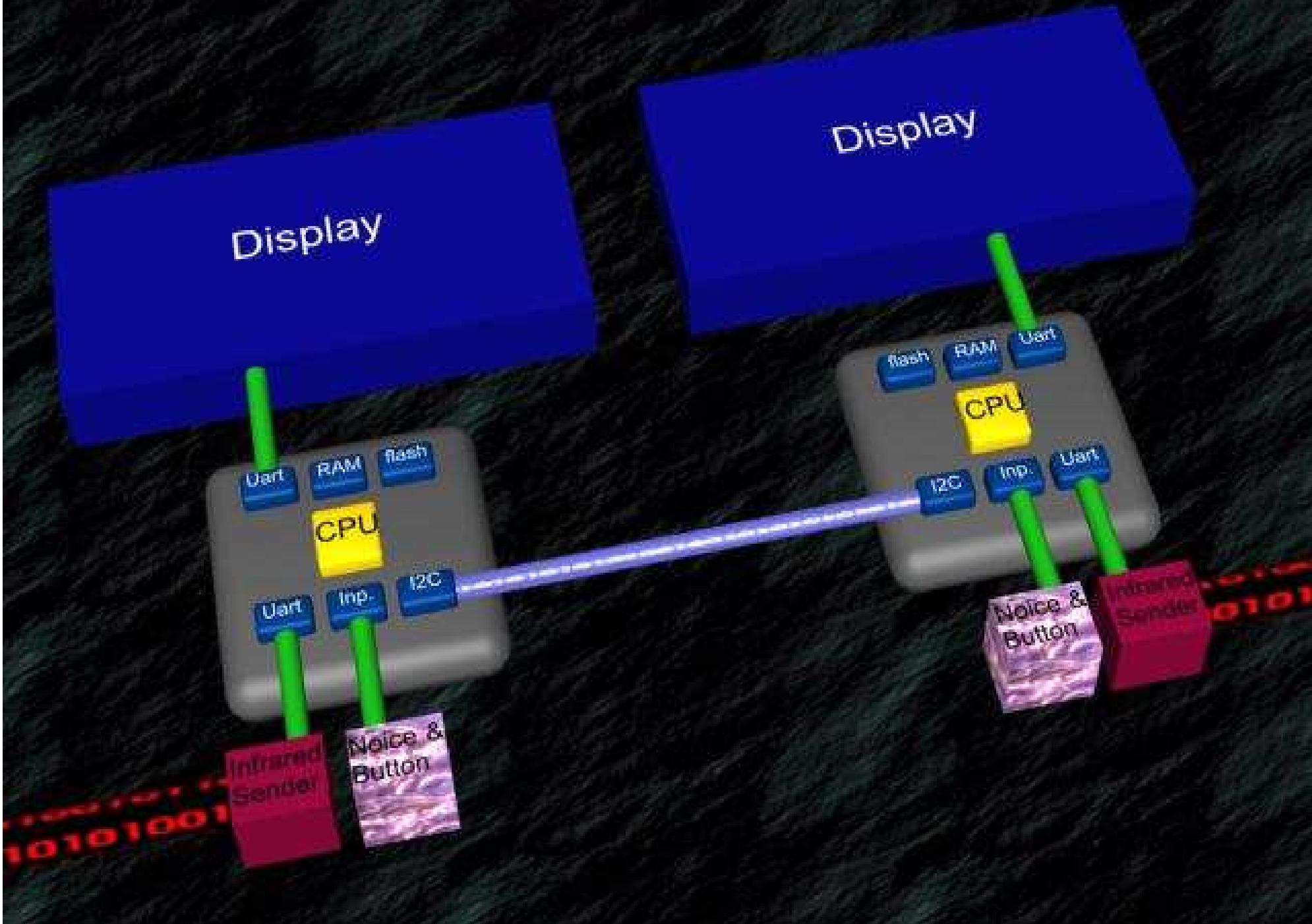


# KENO: Mit Sicherheit zufällig

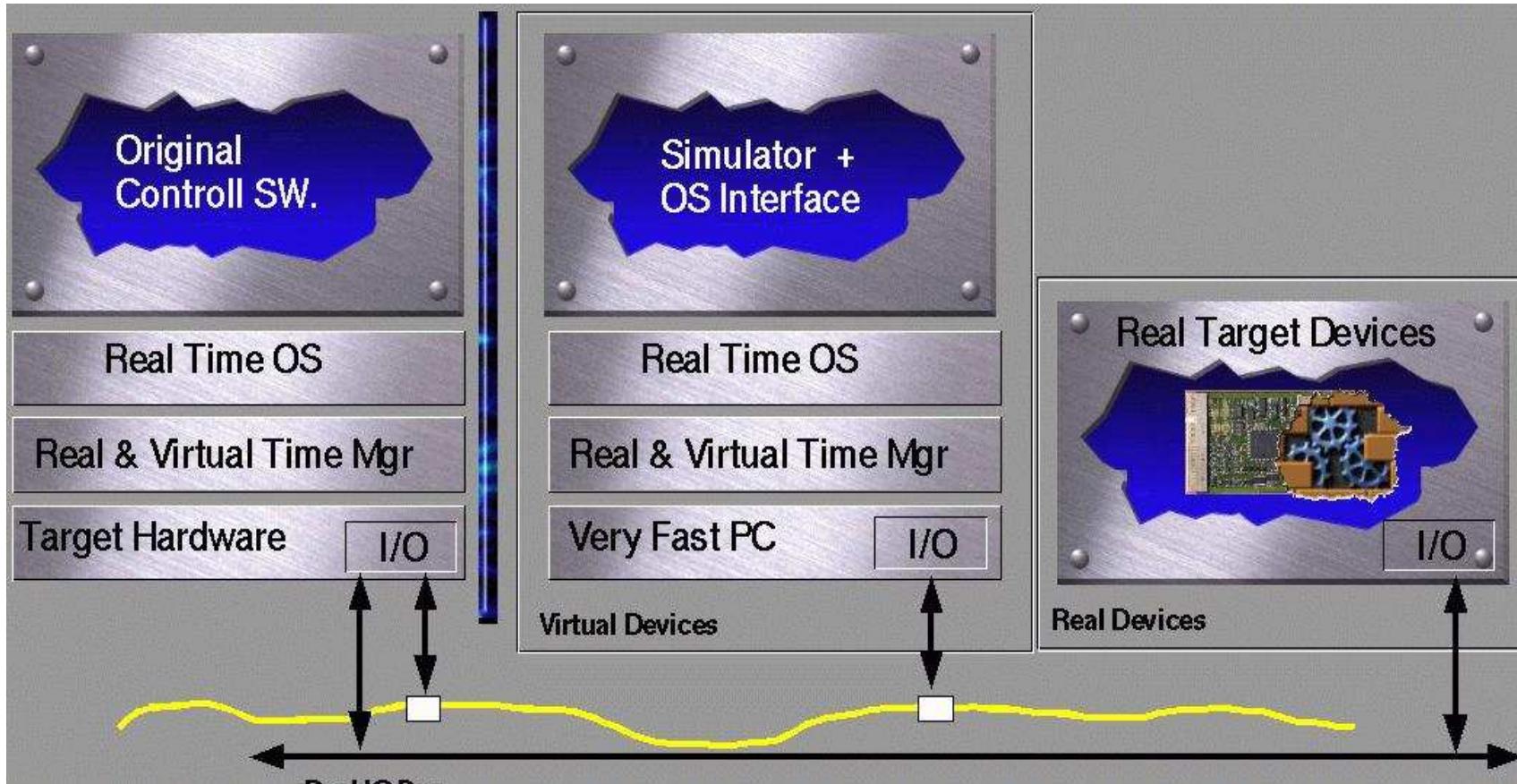


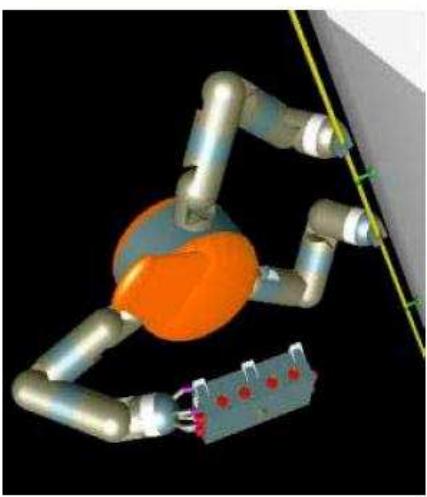
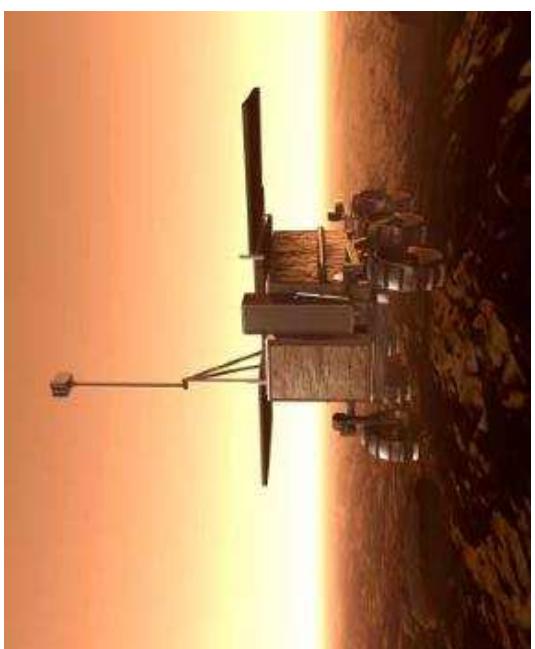
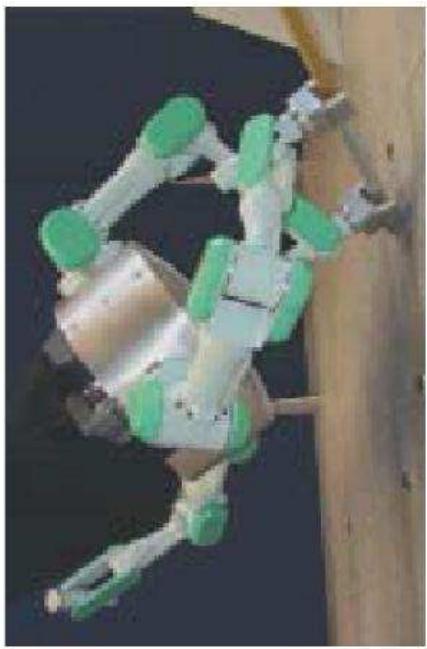
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# Fehlertoleranz in KENO

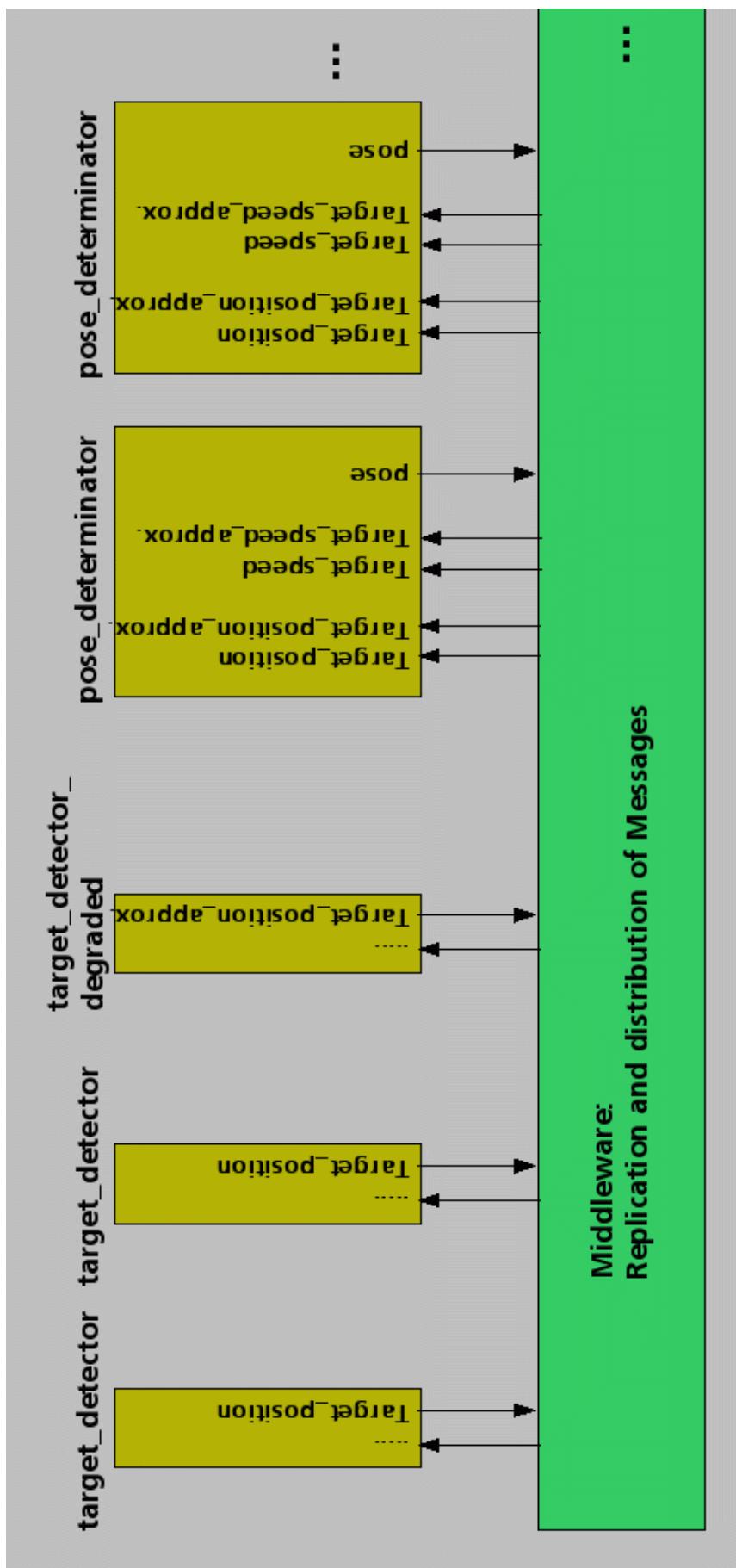


# Software in the Loop Test/Simulation

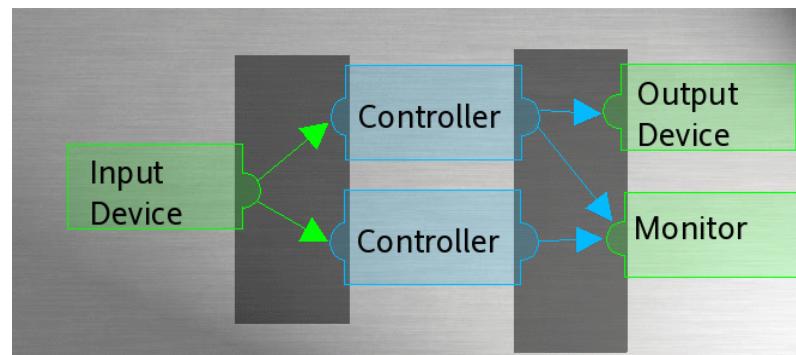




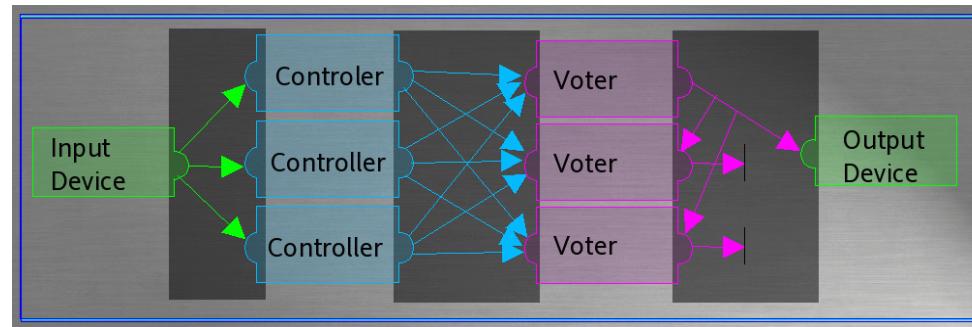
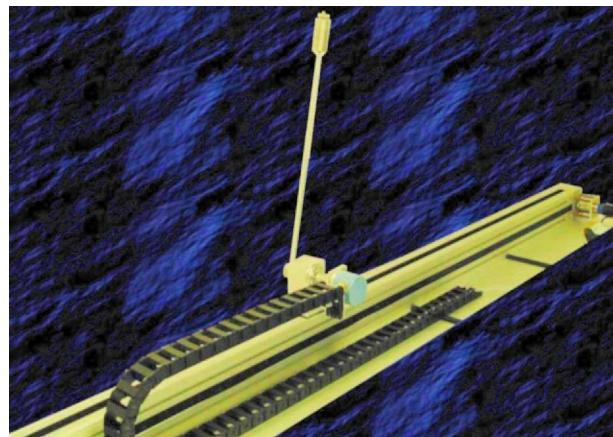
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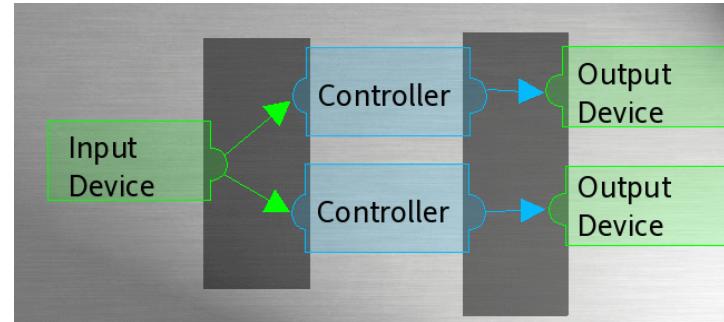
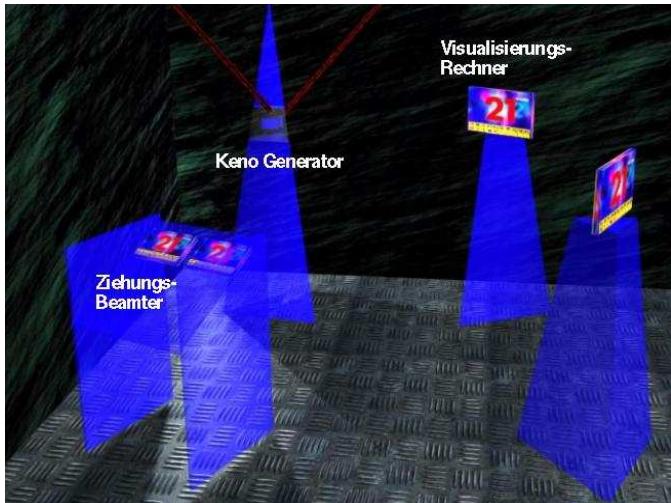
# BIRD



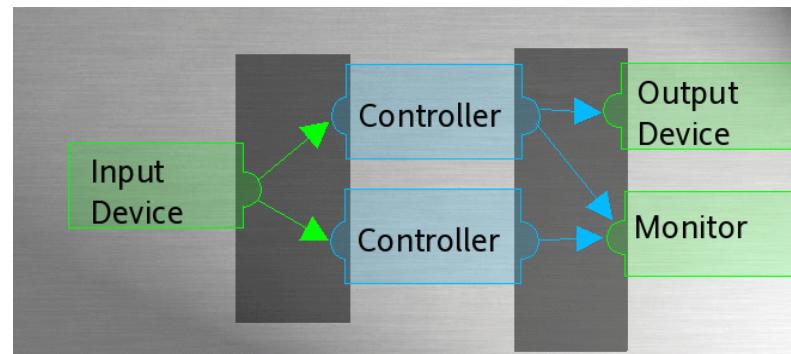
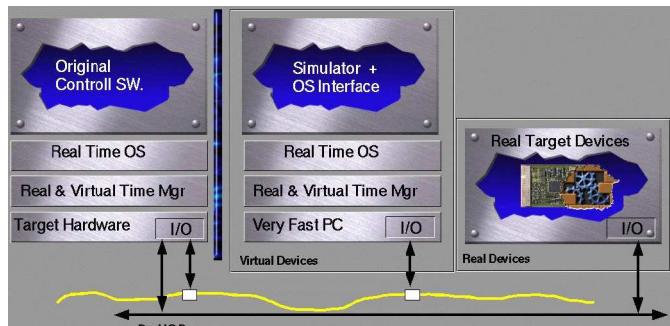
# Pendulum



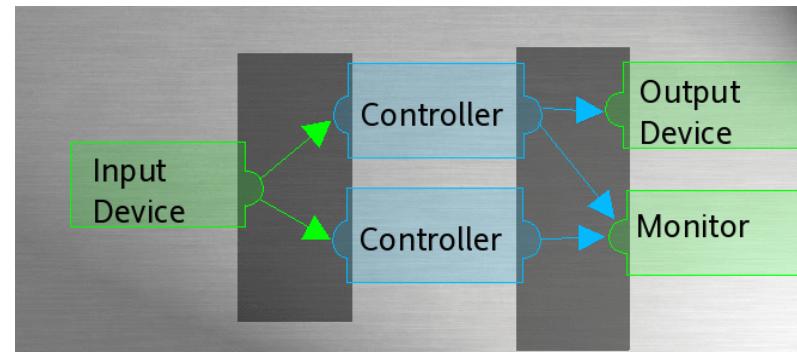
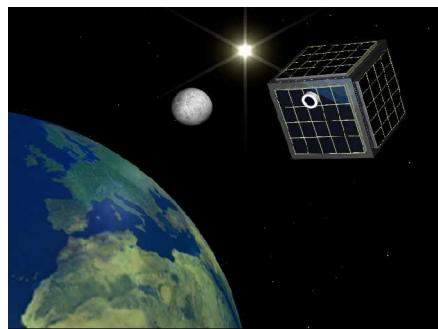
# Keno



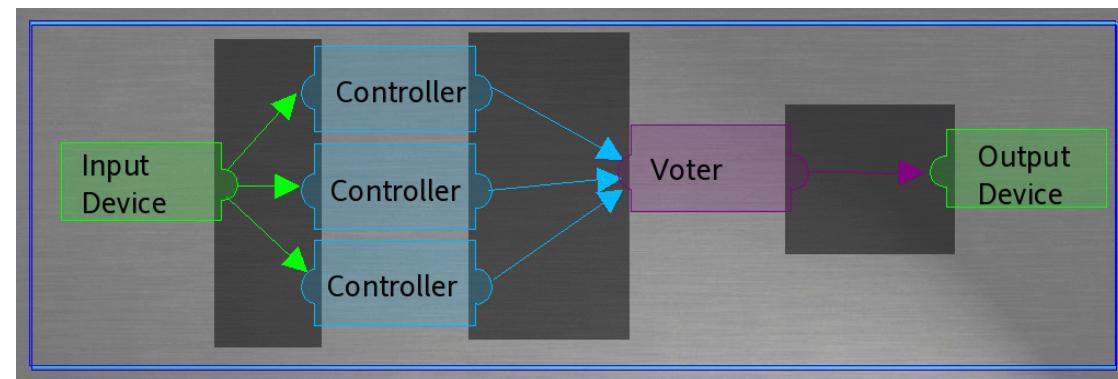
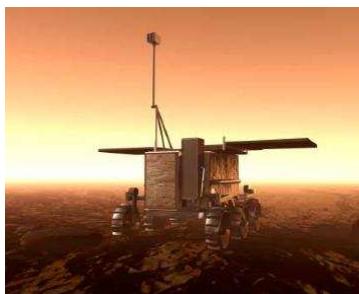
# SiEST



# CUBE-SAT



# Study: Pasteur





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