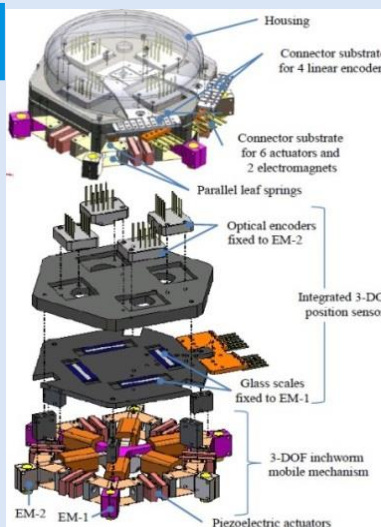
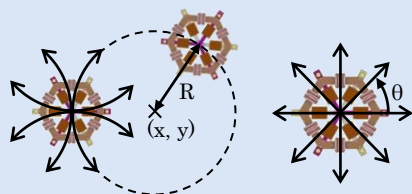
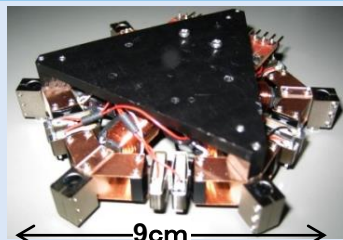


Micro robot and mechanism Lab.

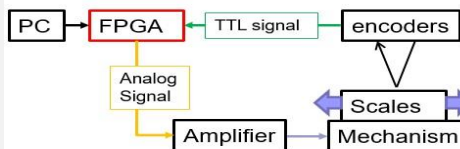
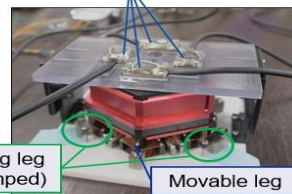
Keyword; mechanism, micro robotics, precise positioning, control, micro manipulation

Precise mobile robots



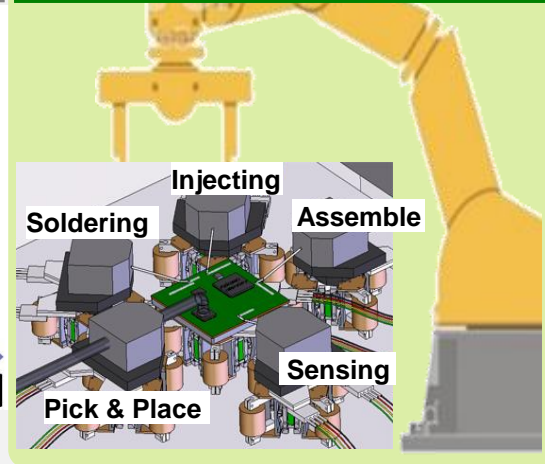
Measuring & Control

Encoders with 0.1 μm res.

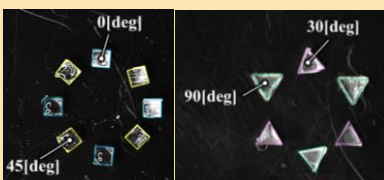


<XY θ nm-scale servo control>

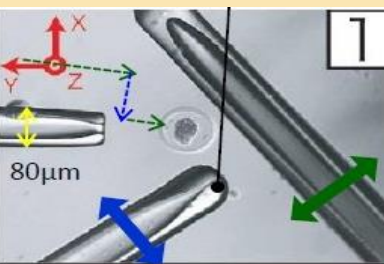
Flexible μ robotic factory



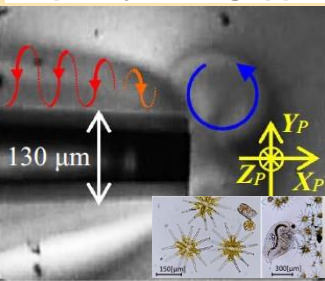
Precise Tools



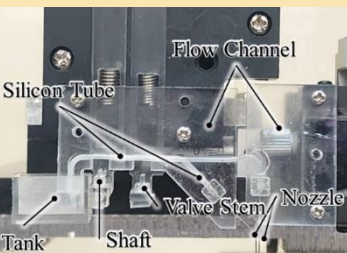
[Micro parts assembly]



[In-liquid manipulation]



[Vibration induced flow]



[Capillary force gripper]

Special electronics

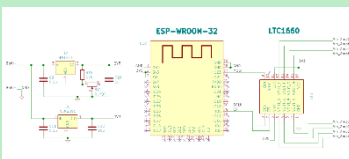
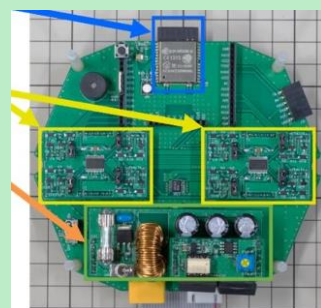
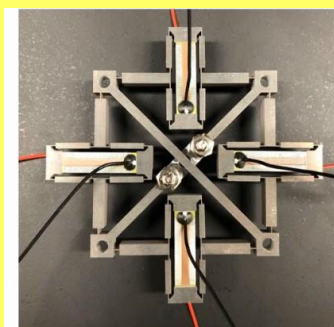
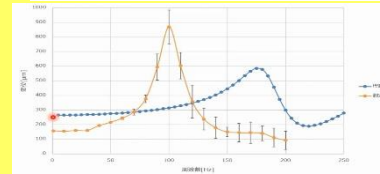
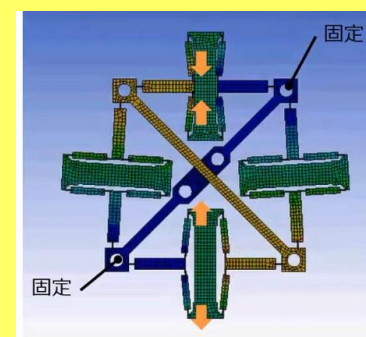


Fig.2.3 Conceptual diagram of cableless piezoelectric driver

Fine Mech. design



サイズ	67×67×5[mm]
重量	34[g]
ヒンジ幅	0.2[mm]



<Frequency response anal.>