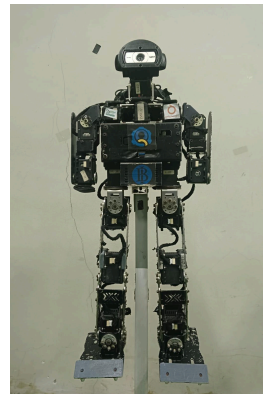
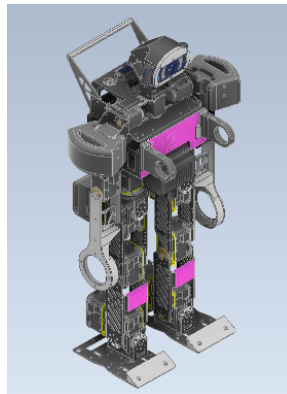


Robot Specification of ICHIRO ITS

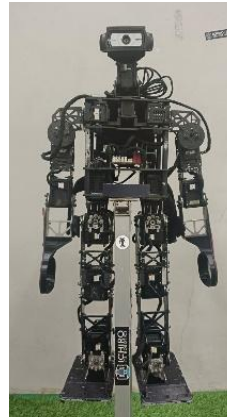
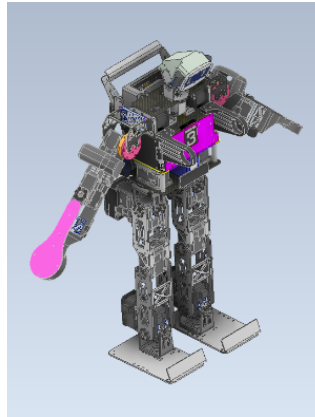
December 11, 2023

Muhtadin¹, Thalib Falih Fadhil Rabbani¹, Ahmad Fauzi¹, Nathanael Adrien Yohanta¹, Darma Susila Putra¹, Muhammad Rizky Agung¹, Hanun Shaka Puspa¹, , Aziel Godwin Hutajulu¹, Anindya Clarasanty¹, Alexander Fleming¹, Fatimah Shofi Lathifa¹, Alfian Fadhil Muharram¹, Faa'iz Haikal Hilmi¹, Nehemy Davis Suryanto¹, Mohammad Arfan Nur Rahman¹, Arasy Al Jabbaar¹, Thomas Prayoga Susanto¹, Muhammad Rusydi Al Hakim¹, Ahmad Rizki Habibi¹, Luthfiah Khafifah Rahmi¹, Sakti Arisena Damai Prasetyo¹, Eka Dewi Ratna Wati¹, Daniel Parulian Sihotang¹, Devy Relliani Saffiyah¹, Amalia Firda Az-Zahra¹.

¹ Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia
thalibfalih@gmail.com, muhtadin@ee.its.ac.id
<http://ichiro.its.ac.id>



Robot name	Hiro	
Height	563 mm	
Weight	5 kg	
Walking speed	~ 25 cm/s	
Degrees of freedom	20 DoF	
	8	MX-28 (Pitch, Roll, & Yaw)
	12	MX-64 (Pitch, Roll, & Yaw)
Actuators	Head and arm using Dynamixel MX 28	
	Leg using Dynamixel MX 64	
Sensors	Camera	Logitech C930
	IMU	BNO055 9 Degree of Freedom (Magnetometer is not used)
Computing unit	Intel NUC 10 (Intel i3-10110U)	
Sub-Controller	CM-740	
OS	Linux (Ubuntu 22.04)	
Other specs	Battery Lipo 4S 3300 mAh	



Robot name	Ithaaro	
Height	698mm	
Weight	6,7 kg	
Walking speed	~ 33 cm/s	
Degrees of freedom	20 DoF	
	8	MX-28 and MX-64 (Pitch, Roll, & Yaw)
	12	MX-106 (Pitch, Roll, & Yaw)
Actuators	Head and arm using combination of Dynamixel MX 28 & MX-64	
	Leg using Dynamixel MX-106	
Sensors	Camera	Logitech C930
	IMU	BNO055 9 Degree of Freedom (Magneto is not used)
Computing unit	Intel NUC 10 (Intel i3-10110U)	
Sub-Controller	CM-740	
OS	Linux (Ubuntu 22.04)	
Other specs	Battery Lipo 4S 3300 mAh	