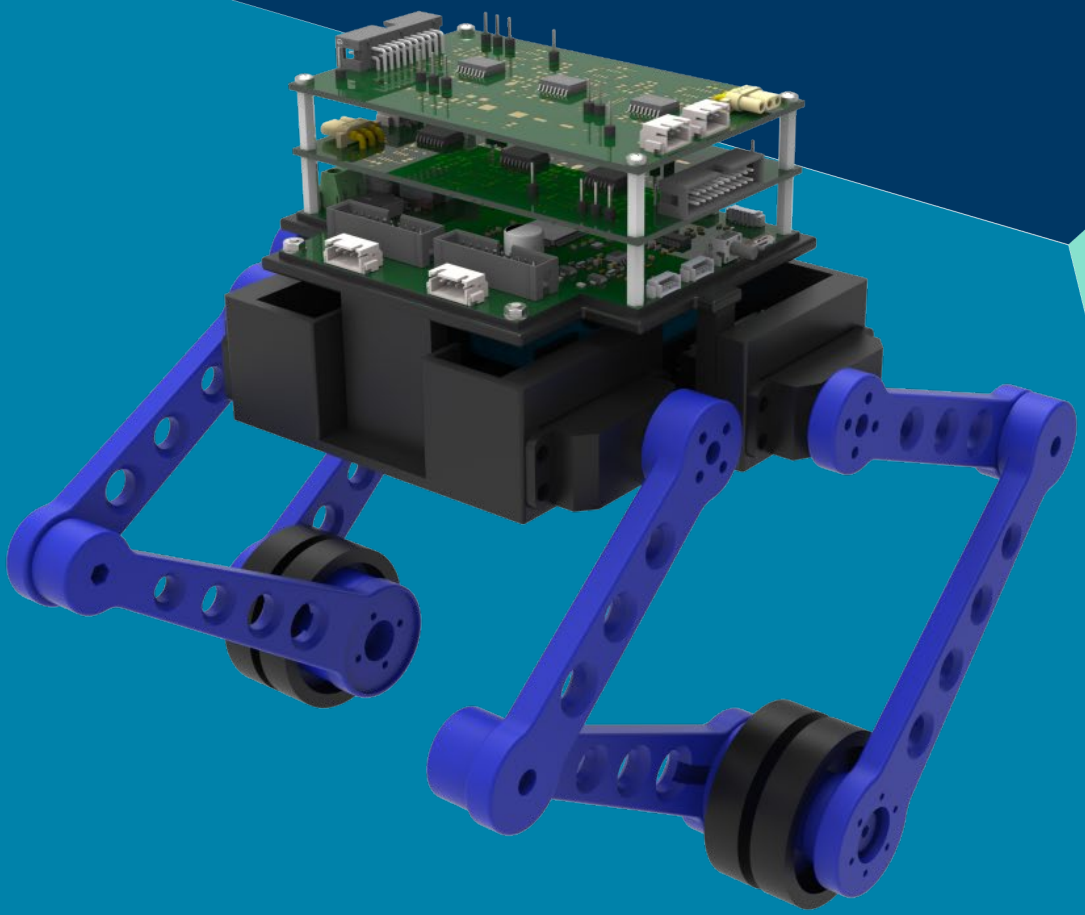
worldskills

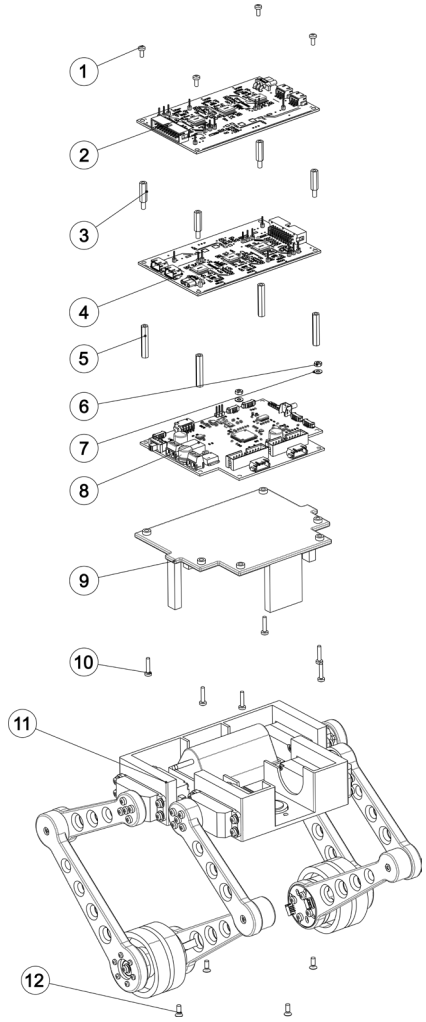
Test Project

Bipedal wheeled robot assembly manual

Electronics



Bipedal wheeled robot Structure diagram and detailed table

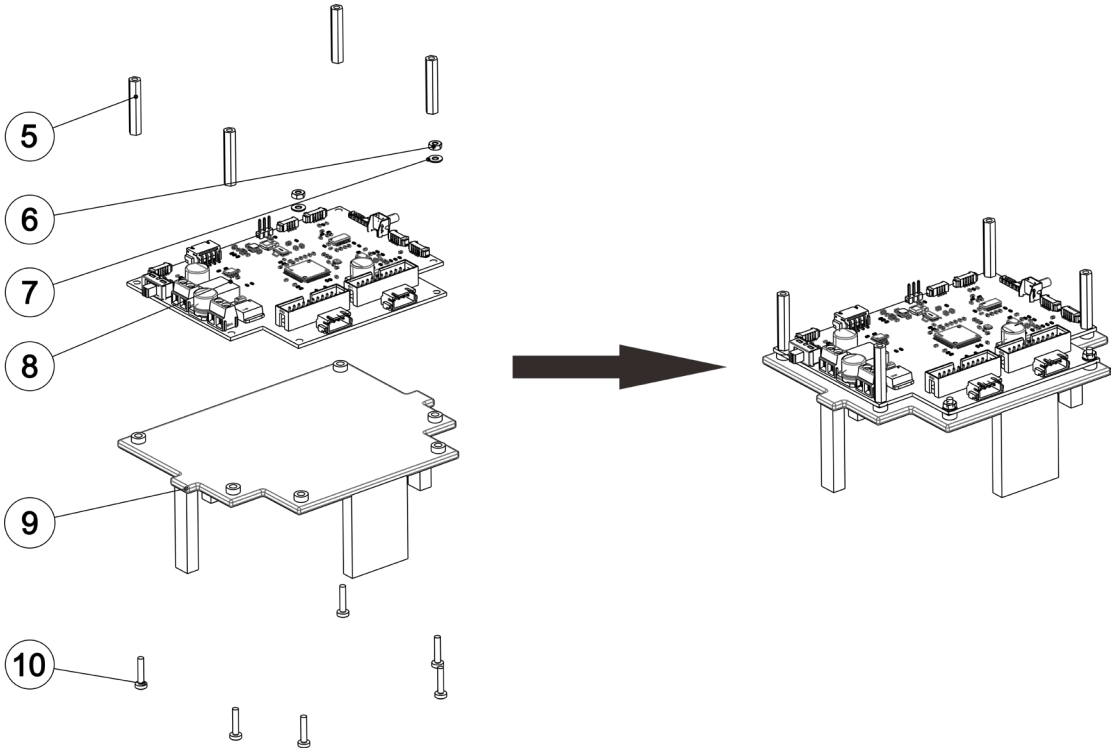


12	Cross countersunk head screw	stainless steel, M3*8	4	
11	Robot body	Component	1	
10	Cross groove pan head screw	stainless steel, M3*12	6	
9	Circuit board fasteners	ABS	1	
8	MCU module	PCB	1	
7	Flat washer	stainless steel, Φ3	2	
6	Hex nut	stainless steel, M3	2	
5	Double ended nylon column	M3*25	4	
4	right driver board	PCB	1	
3	Single head hexagonal nylon column	M3*15+6	4	
2	left driver board	PCB	1	
1	Cross groove pan head screw	stainless steel, M3*6	4	
Serial number	Name	Material Specifications	Quantity	Remark

© WorldSkills International

一、Assembly steps

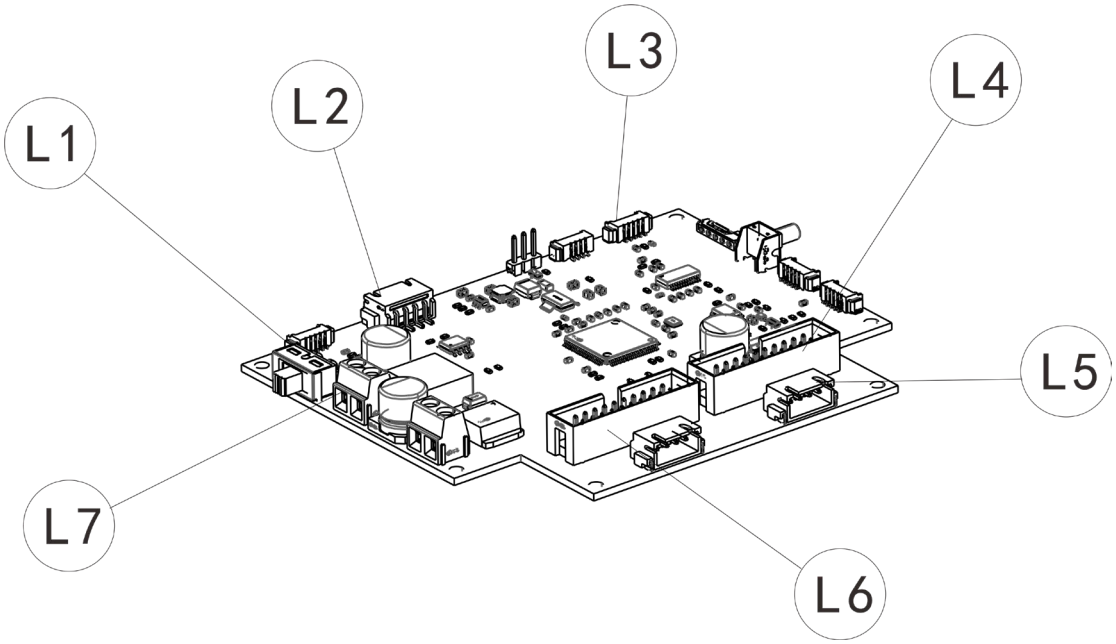
（一）Assembly MCU module



Serial number	Name	Material Specifications	Quantity	Remark
10	Cross groove pan head screw	stainless steel, M3*8	6	
9	Circuit board fasteners	ABS	1	
8	MCU module	PCB	1	
7	Flat washer	stainless steel, Φ3	4	
6	Hex nut	stainless steel, M3	4	
5	Double copper pillar	M3*16	4	

© WorldSkills International

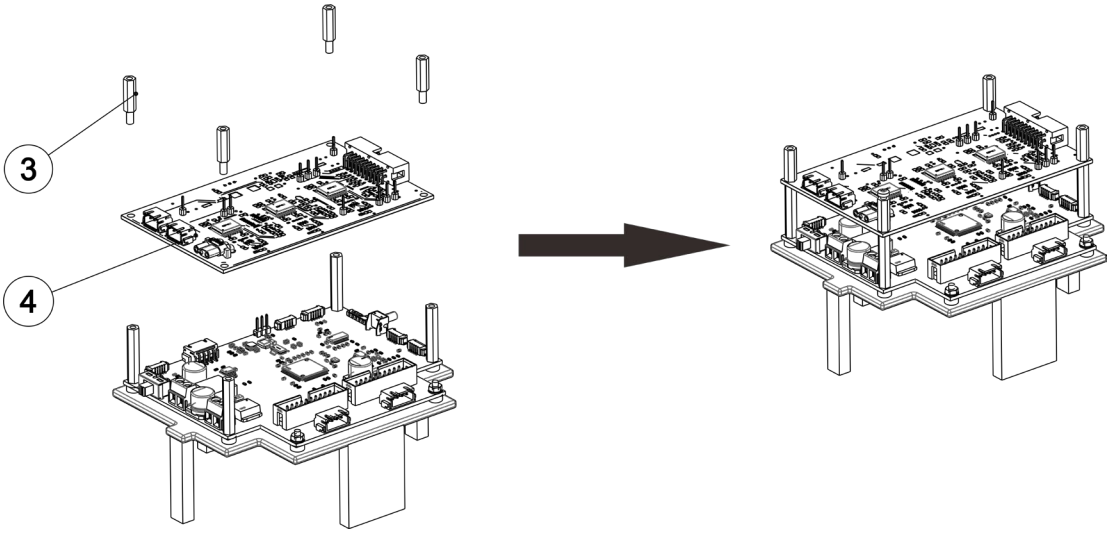
（二）MCU module wiring



L7	Power in	12V DC or battery	Use battery during function demonstration
L6	ML	Left driver board SV1	Your PCB
L5	Speaker	Speaker	
L4	MR	Right driver board SV1	
L3	ER	Left wheel encoder	
L2	Joystick	Joystick	
L1	EL	Right wheel encoder	
Serial number	Interface	Specification	Remark

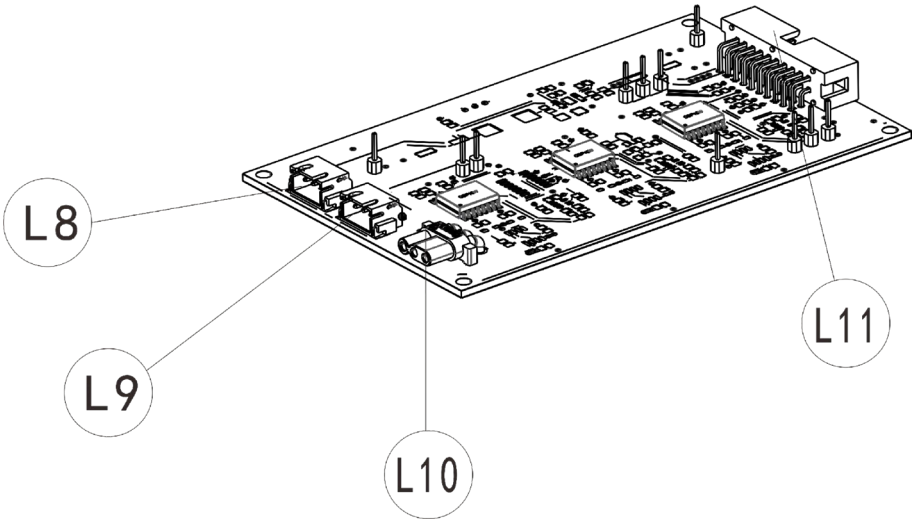
© WorldSkills International

（三）Assembly right driver board



4	right driver board	PCB	1	
3	Single headed hexagonal copper pillar	M3*15+6	4	
Serial number	Name	Material Specifications	Quantity	Remark

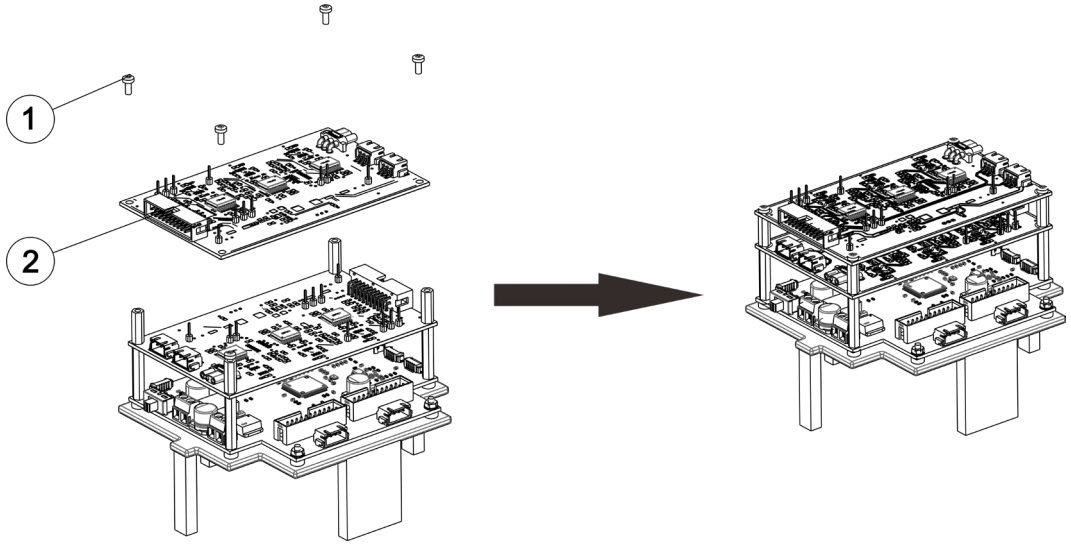
（四）Right driver board wiring



L11	SV1	MCU module MR	
L10	CON1	Right motor	
L9	JP2	Right front servo	
L8	JP1	Right rear servo	
Serial number	Interface	Specification	Remark

© WorldSkills International

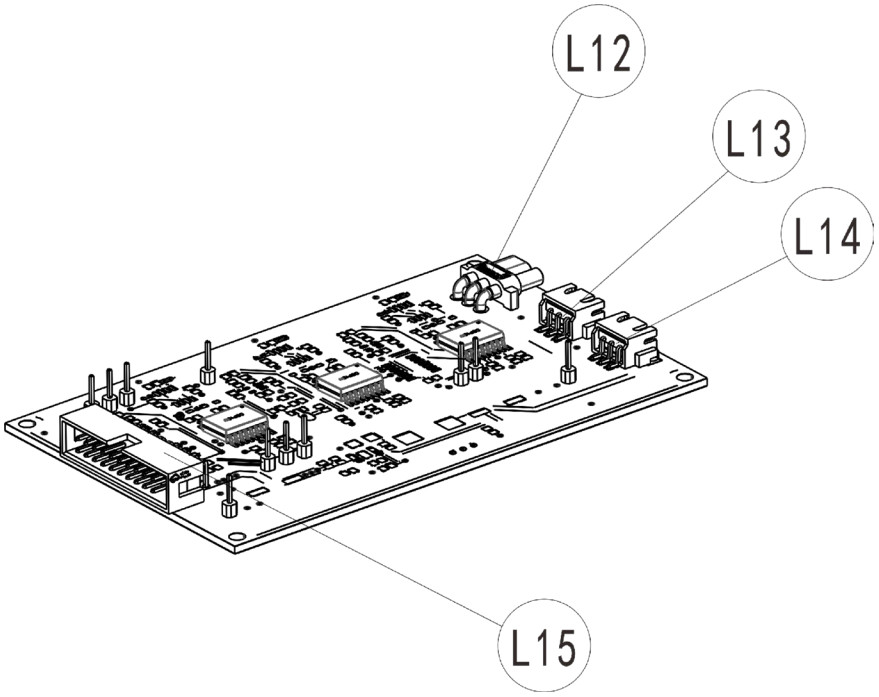
（五）**Assembly left driver board**



2	left driver board	PCB	1	
1	Cross groove pan head screw	stainless steel, M3*6	4	
Serial number	Name	Material Specifications	Quantity	Remark

© WorldSkills International

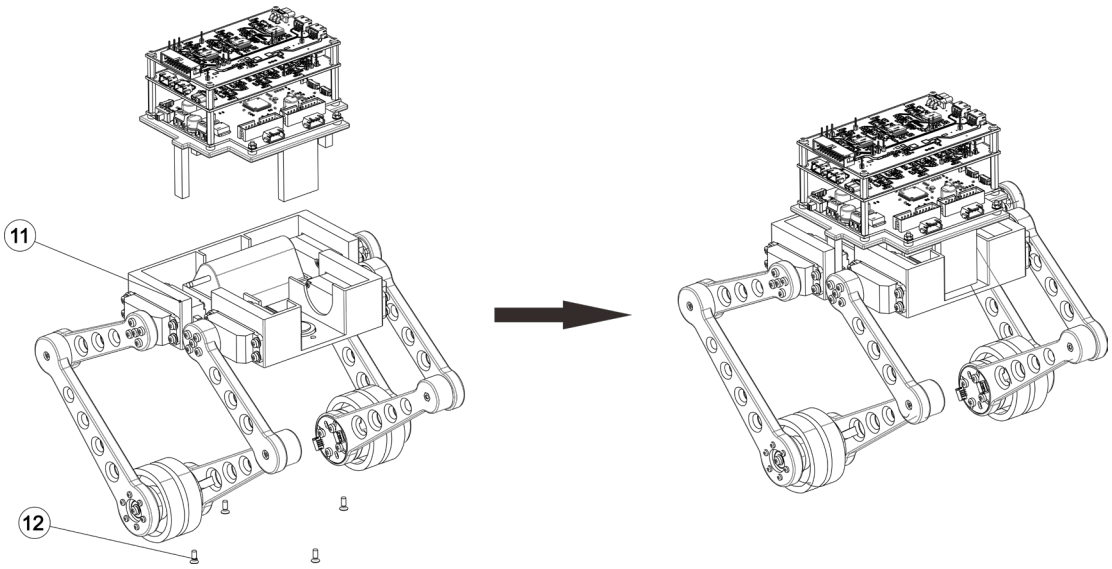
（六）Left driver board wiring



L15	SV1	MCU module ML	
L14	JP1	Left front servo	
L13	JP2	Left rear servo	
L12	CON1	Left motor	
Serial number	Interface	Specification	Remark

© WorldSkills International

（七）The circuit board is assembled as a whole onto the robot body



12	Cross countersunk head screw	stainless steel, M3*8	4	
11	Robot body	Component	1	
Serial number	Name	Material Specifications	Quantity	Remark

© WorldSkills International