# Toyota Yaris 2010 1.5L 1NZ-FE ECU Pinsout





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Symbol (Terminal No.)	Wiring	Terminal Description	Condition	Specified Condition
BATT (A21-20) - E1 (G20-104)	Y-W	flattery (for measuring battery voltage and for EGM memory)	Always	11 to 14 V
+BM (A21-3) - ME01 (C20-43)	GA-BA	Power source of throttle actuator	Always	11 to 14 V
(C29-104) - E1	R-W	ignition switch	Ignition switch ON	11 to 14 V
+B (A21-2) - E1 (C20-104)	8 - W	Power source of ECM	ignition switch ON	11 to 14 V
+B2 (A21-1) - E1 (C29-104)	B.W.	Power source of ECM	Ignition switch ON	1130 34 V
OG1+ (C20-100) - OG1- (G20-123)	BR B	Camshaft timing oil control valve (OCV)	lidling	Pulse generation (see waveform 1)
MREL (A21-44) - E1 (G20-104)	GR-W	EFI relay	lignition switch ON	11 to 14 V
VG (C20-116) - E2G (C20-116)	GR - LG	Mass air flow meter	idling. Transmission gear neutral, A/C switch OFF	0.5 to 3.0 V
THA (C20-65) - ETHA (C20-66)	P-06	Intake air temperature sensor	idling, Intake air temperature 20°C (66°F)	0.5 to 3.4 V
THW (C20-97) - ETHW (C20-96)	Line	Engine coolant temperature sensor	idling, Engine opolant temperature 80°C (176°F)	0.2 to 1.0 V
VCTA (C20-67) - ETA (C20-91)	w-v	Power source of throttle position sensor (specific voltage)	ignition switch ON	4.5 to 5.5 V
VTA1 (C20-115) - ETA (C20-91)	V - V	Thruttle position sensor (for engine central)	Ignition switch ON, Throttle valve fully closed	0.5 to 1,1 V
			Ignition switch ON, Threttle valve fully open	3.2 to 4.6 V
VTA2 (C20-114) - ETA (C20-91)	GR-V	Throttle position sensor (for sensor mailunction detection)	Ignition switch ON, Throttle valve fully closed	2.1 to 3.1 V
			Ignition switch ON. Throttle valve fully open	4.5 to 5.0 V
VPA (A21-65) - EPA (A21-69)	n-a	Accelerator pedal position sensor (for engine control)	ignition switch ON, Accelerator pedial released	0.5 to 1.1 V
			Ignition switch ON, Appelerator pedal fully depressed	2.5 to 4.5 V
VPA2 (A21-56) - EPA2 (A21-60)	L-DR	Accelerator pedal position sensor (for sensor mailfunctioning detection)	Ignition switch ON, Accelerator pedal released	1.2 to 2.0 V
			Ignition switch ON, Accelerator pedal fully depressed	3.4 to 4.7 V
VCPA (A21-57) - EPA (A21-59)	B - G	Power source of accelerator pedal position sensor (for VPA)	Ignition switch ON	4.5 to 5.5 V
VCP2 (A21-58) - EPA2 (A21-60)	W-BB	Power source of accelerator pedal position sensor (for VPA2)	Ignition switch ON	4.5 to 5.5 V
HA1A (C20-109) - E04 (C20-46)	G - W-B	A/F sensor header	Idling with warm engine	Pulse generation (see wayedorm 2)
			Ignition switch ON	11 to 14 W
A1A+ (020-112) - E1 (020-104)	W-W	A/F sensor	Ignition switch ON	3.3 V*
A1A- (C20-113) - E1 (C20-104)	LO - W	A/F sensor	Ignition switch ON	2.9 V"

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**Tobias Bleicker** 

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web may 30 2022 when the mbbr is placed before the nitrification reactor the most economical design option is to consider the use of the mbbr for organic removal this

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