

Important notes

- Unless specified, all output pins are designed to switch low-side (ie. ECU switches to ground) and have an **absolute max rating** of 2 amps - You must keep your usage below this limit!
- Items in **red** are for when E-Throttle is being used - Assumes having an E-Throttle compatible Link G4+ / PnP (Only for Link PCB revision v1.4 or above)
- Items in **blue** are for when sequential ignition is being used - These require extra wire running from the cabin to the engine bay
- Items in **green** are for when the ECU is installed in a Galant VR-4 / Legnum EC5x
- Items in **orange** are for when the ECU is installed in a FTO DE3A - **Currently in development**
- Items that are *italic* are free for use by your own projects if not being used for anything else (pay particular attention to AUX4 / AUX9 usage notes though!)

Some pins are configured via switches on the PCB - pay close attention to avoid damage to the ECU or your car!

Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
Aux Inj 1	Fuel Injection	2A to GND	Injector 1	Pin 1		(Required for essential function of car)	
Aux Inj 2	Fuel Injection		Injector 2	Pin 14		(Required for essential function of car)	
Aux Inj 3	Fuel Injection		Injector 3	Pin 2		(Required for essential function of car)	
Aux Inj 4	Fuel Injection		Injector 4	Pin 15		(Required for essential function of car)	
Aux Inj 5	Fuel Injection		Injector 5	Pin 3		(Required for essential function of car)	
Aux Inj 6	Fuel Injection		Injector 6	Pin 16		(Required for essential function of car)	
Aux Inj 7	TCL Vent Control Solenoid Valve (if TCL present)		Engine Bay Firewall	Pin 31		Free for use - Disconnect solenoid first if present - Supports up to 300 Hz output	
Aux Inj 8	TCL Vacuum Solenoid Valve (if TCL present)		Engine Bay Firewall	Pin 32			
Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
Aux Ign 1	Ignition	2A to GND	Ignition Coil 1	Pin 10		(Required for essential function of car)	
Aux Ign 2	Ignition		Ignition Coil 2	Pin 23		(Required for essential function of car)	
Aux Ign 3	Ignition		Ignition Coil 3	Pin 11		(Required for essential function of car)	
Aux Ign 4	Sequential Ignition or Unused		Pin 24	CN4 Pin 23	Additional coil pack only when sequential ignition is being used - Free for use if no sequential ignition		
Aux Ign 5	Sequential Ignition or Unused		Pin 6	CN4 Pin 22	Additional coil pack only when sequential ignition is being used - Free for use if no sequential ignition		
Aux Ign 6	Sequential Ignition or Unused		Pin 20	CN4 Pin 21	Additional coil pack only when sequential ignition is being used - Free for use if no sequential ignition		
Aux Ign 7	Unused for EC5x, MIVEC OCV RIGHT on DE3A		Pin 34		Free for use on EC5x - Supports up to 300 Hz output		
Aux Ign 8	FP Speed on EC5x, MIVEC OCV LEFT on DE3A		Engine Bay Firewall	Pin 35		Free for use if Fuel Pump Speed Relay is hotwired / bypassed on EC5x - Supports up to 300 Hz output	
Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
Aux Out 1	Radiator Fan PWM on EC5x, Fan Relay on DE3A	2A to GND	Radiator Fan	Pin 21		(Required for essential function of car)	
Aux Out 2	Wastegate Solenoid on EC5x, Unused on DE3A		Right side of Engine	Pin 43		(Required for essential function of car)	
Aux Out 3	Unused		Top of Engine	Pin 58 (via SW1)	CN4 Pin 20	Free for use - Supports up to 4000 Hz output - Recommend this is used to control Tacho in Sequential Ignition	
Aux Out 4	Unused - WARNING: Read Notes!	2A to GND 0.5A to VCC	Right side of Engine	Pin 9		Free for use only when physical AUX9 is NOT being used - Do not connect if AUX9 is in use!	
Aux Out 5	Idle Stepper Control Valve or Unused		Right side of Engine	Pin 4 (via SW2)	CN4 Pin 19	Free for use when E-Throttle is being used - Supports up to 300 Hz output	
Aux Out 6	Idle Stepper Control Valve or Unused		Right side of Engine	Pin 17 (via SW2)	CN4 Pin 18	Free for use when E-Throttle is being used - Supports up to 300 Hz output	
Aux Out 7	Idle Stepper Control Valve or Unused		Right side of Engine	Pin 5 (via SW2)	CN4 Pin 17	Free for use when E-Throttle is being used - Supports up to 300 Hz output	
Aux Out 8	Idle Stepper Control Valve or Unused		Right side of Engine	Pin 18 (via SW2)	CN4 Pin 16	Free for use when E-Throttle is being used - Supports up to 300 Hz output	
Aux Out 9	Unused or E-Throttle Motor Negative - on EC5x ICV Pos Motor Pin 11 or E-Throttle - on DE3A		Right side of Engine	Pin 4 (via SW2) Pin 39	CN4 Pin 15	Mirrors AUX4 - Free for use when E-Throttle is not used nor AUX4 - Do not connect if AUX4 is in use!	
Aux Out 10	Unused or E-Throttle Motor Positive + on EC5x ICV Pos Motor Pin 12 or E-Throttle + on DE3A		Right side of Engine	Pin 17 (via SW2) Pin 40	CN4 Pin 14	AUX10 is actually AUX9 in PCLink Software - Free for use if E-Throttle is not used	
Aux Out 11	ECU Hold Power or E-Throttle Power		Right side of Engine	Pin 38 (via SW1)		ECU Hold Power is not required in E-Throttle Mode so this output is reused for E-Throttle Power	
Aux Out 12	Check Engine Light	2A to GND	Dashboard	Pin 36		(Required for essential function of car)	
Aux Out 13	Fuel Pump Relay		Engine Bay Firewall	Pin 8		(Required for essential function of car)	
Aux Out 14	Alternator Enable		Alternator	Pin 54		Free for use if you disconnect the wire going to the alternator - not required - supports basic switching only	
Aux Out 15	FP Solenoid on EC5x, Unused on DE3A		Right side of Engine	Pin 7		Free for use if Fuel Pressure Solenoid is disconnected (it's not required) - supports basic switching only	
Aux Out 16	Aircon Clutch Control		Lower Engine Bay	Pin 22		(Required for essential function of car)	
Link ECU Pin	Pin Function		Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes
Digital Input 1	Unused on EC5x, ICV Pos Sensor Pin 4 on DE3A	Up to 1A		Pin 33	CN4 Pin 2	Free for use - Supports up to 500 Hz input	
Digital Input 2	Unused on EC5x, ICV Pos Sensor Pin 2 on DE3A			Pin 41	CN4 Pin 3	Free for use - Supports up to 500 Hz input	
Digital Input 3	Unused			Pin 42	CN4 Pin 4	Free for use - Supports up to 500 Hz input	
Digital Input 4	Unused			Pin 44	CN4 Pin 5	Free for use - Supports up to 500 Hz input	
Digital Input 5	AC Full Cold Signal on EC5x, Unused on DE3A			Lower Engine Bay	Pin 57		Supports up to 500 Hz input
Digital Input 6	Dual Pressure Aircon Switch			Lower Engine Bay	Pin 45		Supports up to 500 Hz input
Digital Input 7	Idle Switch			Right side of Engine	Pin 87		Not strictly required - idle can be adjusted in software - Supports up to 500 Hz input
Digital Input 8	Speed Pulse Signal			Gearbox	Pin 86		(Required for essential function of car)
Digital Input 9	Torque Reduction Signal or Clutch Pedal			AT ECU	Pin 46		Only used by automatics with TCL - Supports up to 500 Hz input - Note: This has a 10K pulldown to GND
Digital Input 10	Power Steering Pressure Switch			AC ECU	Pin 37		Not strictly required - idle can be adjusted in software - Supports up to 500 Hz input
Digital Input 11	Ignition Switch			Steering Column	Pin 82	CN8 Pin 7	(Required for essential function of car)
Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
Analog Volt 1	External MAP Sensor	Up to 1A	MAF Sensor	Pin 90		Reuses MAF Air Flow Signal Pin - Free for use if on-board MAP sensor is being used and MAF disconnected	
Analog Volt 2	Throttle Position Sensor or Unused		Right side of Engine	Pin 84		This pin can be reused when E-Throttle is being used, this pin reuses the factory TPS sensor wire	
Analog Volt 3	Lambda Signal		Passenger footwell	Pin 76		Free for use if CAN Lambda is being used	
Analog Volt 4	Unused		MAF Sensor	Pin 85		Reuses MAF Baro Sensor Pin - Free for use if MAF disconnected	
Analog Volt 5	Unused or Throttle Position Sensor (Main)		Right side of Engine	Pin 5 (via SW2)	CN4 Pin 6	Free for use when E-Throttle is not being used	
Analog Volt 6	Unused or Cruise Control Stalk Input				CN4 Pin 7	Free for use when E-Throttle is not being used	
Analog Volt 7	Unused or Accelerator Position Sensor (Main)		Drivers footwell	Pin 51	CN4 Pin 8	Free for use when E-Throttle is not being used	
Analog Volt 8	Unused or Accelerator Position Sensor (Sub)		Drivers footwell	Pin 52	CN4 Pin 9	Free for use when E-Throttle is not being used	
Analog Volt 9	Unused or Throttle Position Sensor (Sub)			Pin 18 (via SW2) Pin 60	CN4 Pin 10	Free for use when E-Throttle is not being used	
Analog Volt 10	Unused			Pin 61	CN4 Pin 11	Free for use	
Analog Volt 11	Unused on EC5x, secondary lambda on DE3A			Pin 75	CN8 Pin 5	Free for use	
Analog Volt 12	Unused or Internal MAP Sensor		Link ECU	Pin 77	CN8 Pin 6	Free for use if on-board MAP sensor isn't being used - solder across SJ1 enables on-board MAP sensor	
Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
Analog Temp 1	Engine Coolant Temp Sensor	Up to 1A	Engine	Pin 83		(Required for essential function of car)	
Analog Temp 2	Intake Air Temp Sensor		MAF Sensor	Pin 72		May require aftermarket IAT Sensor adding to Intake Elbow; Pin 72	
Analog Temp 3	Unused		MAF Sensor	Pin 19	CN8 Pin 2	Free for use if you disconnect the MAF Reset Signal Pin - Link does not use this	
Analog Temp 4	Alternator Field Response (Term. FR)		Alternator	Pin 55		Free for use if you disconnect the wire going to the alternator - Link does not use this but can monitor it	
Link ECU Pin	Pin Function	Max Current	Wire Destination	Harness Pin	Expansion Pin	Usage Notes	
GND Pins	Main ground	Up to 2A	Chassis	Pins 13 / 26	Both Pin 1	Goes to Chassis Ground	
12V Main Power	Main VCC	Up to 4A	ECU Hold Relay	Pins 12 / 24	CN4 Pin 13	Switched on via Ignition Switch, held on by ECU for 5 seconds when ignition turned off if not using E-Throttle	
Permanent 12V	Not used - see notes	Up to 2A	Battery	Pin 80	CN8 Pin 8	Not used by Link ECU itself, fed to feature plug CN8 for optional accessories	
12V E-Throttle In	Main VCC or Power Supply for E-Throttle	Up to 4A	Link ECU			Without E-Throttle this should be connected to Main VCC - our board does this with SW1	
GND Out Pins	Ground supply for sensors	Up to 1A	Various sensors	Pin 92	CN4 Pin 12	Do not connect to chassis ground, directly or indirectly via 3rd party accessories, damage may occur	
5V Out	Power supply for sensors	Up to 2A	Various sensors	Pin 81	CN4 Pin 24		
Trig 1	Crank Angle Sensor		Engine	Pin 89			
Trig 2	Cam Angle Sensor		Engine	Pin 88			
Knock Pin 1	Knock Sensor		Engine	Pin 78		Very sensitive to electrical noise, these wires should be shielded, factory wiring loom does this for you	
RS232 TX Pin	Legacy RS232 for tuning - Transmit	Up to 1A					
RS232 RX Pin	Legacy RS232 for tuning - Receive						
CAN1L	CAN BUS Channel 1 Low			PCB Header CN5			
CAN1H	CAN BUS Channel 1 High						It's recommended that critical CAN BUS devices ie. CAN Lambda are connected separately to accessories
CAN2L	CAN BUS Channel 2 Low						
CAN2H	CAN BUS Channel 2 High						
			OBD Port Pin 14	Pin 73	CN8 Pin 3		
			OBD Port Pin 6	Pin 74	CN8 Pin 4	Not wired to OBD port from the factory, not required to either, but may help with OBD diagnostic tools	

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