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MIL/AERO ANALOG CROSS-REFERENCE GUIDE

NATIONAL VS. LINEAR TECHNOLOGY (LTC)

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National to Linear Technology Cross-Reference Guide – Mil/Aero Analog Products

Comparators

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1011AMH	LM111H/883	Voltage Comparator	8-pin can	8-pin can	Yes	Also available in surface-mount packages
LT1011AMJ8	LM111J-8/883	Voltage Comparator	8-pin Cerdip	8-pin Cerdip	Yes	Also available in surface-mount packages
LT1016MH/883	LM161H/883	Voltage Comparator	10-pin can	10-pin can	No	Operates from $\pm 15V$ supplies
LT1017MH/883	LM193AH/883	Voltage Comparator	8-pin can	8-pin can	Yes	LM193 also available in Cerdip
LT1018MH	LM193AH/883	Voltage Comparator	8-pin can	8-pin can	Yes	LM193 also available in Cerdip

Buffers

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1010MH	LM6125H/883	High Speed Buffer	4-pin TO-39 can	8-pin TO-39 can	No	Higher output current and faster slew rate
LT1010MK	LM6125H/883	High Speed Buffer	4-pin TO-3 can	8-pin TO-39 can	No	Higher output current and faster slew rate

Operational Amplifiers

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1001AMJ/883	LMC6061AMJ/883	Precision Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current
LT1002MJ/883	LMC6062AMJ/883	Dual precision Op Amp	14-pin Cerdip	8-pin Cerdip	No	Ultra low supply current
LT1006AMJ8/883	LMC6061AMJ/883	Precision Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current
LT1007AMJ8/883	CLC411AJ-QML	Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Wider gain bandwidth; offers disable
LT1007MJ8/883	CLC411AJ-QML	Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Wider gain bandwidth; offers disable
LT1008MH	LM108H/883	Low Noise Op Amp	8-pin can	8-pin can	Yes	Rad hard version of LM108 available
LT1012AMH	LM108H/883	Low Noise Op Amp	8-pin can	8-pin can	Yes	Rad hard version of LM108 available
LT1013AMH/883	LM158AH/883	Dual Op Amp	8-pin can	8-pin can	Yes	Internal compensation
LT1013AMJ8/883	LM158AJ/883	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Internal compensation
LT1013AMJ8/883	LMC6482AMJ/883	Low Power Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current; rail-to-rail output
LT1013MJ8/883	LM158J/883	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Internal compensation
LT1013MJ8/883	LMC6482AMJ/883	Low Power Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current; rail-to-rail output
LT1014AMJ/883	LM124AJ/883	Quad Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Also available in surface-mount packages
LT1014AMJ/883	LMC6484AMJ/883	Low Power Quad Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current requirements
LT1014MJ/883	LM124J/883	Quad Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Also available in surface-mount packages
LT1014MJ/883	LMC6484AMJ/883	Low Power Quad Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Ultra low supply current requirements
LT1028AMH/883	CLC425AJ-QML	Ultra Low Noise Op Amp	8-pin can	8-pin Cerdip	No	Faster slew rate and greater gain bandwidth
LT1028AMJ8/883	CLC425AJ-QML	Ultra Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Faster slew rate and greater gain bandwidth
LT1028AMJ8/883	CLC426AJ-QML	Ultra Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	yes	Faster slew rate; greater gain bandwidth; unity gain stable
LT1037AMJ8	CLC411AJ-QML	Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Wider gain bandwidth; offers disable
LT1037MJ8	CLC411AJ-QML	Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Wider gain bandwidth; offers disable



Operational Amplifiers (cont.)

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1056AMH/883	LF156AH/883	JFET Op Amp	8-pin can	8-pin can	Yes	Lower offset voltage drift
LT1056MH/883	LF156H/883	JFET Op Amp	8-pin can	8-pin can	Yes	Lower offset voltage drift
LT1057AMH/883	LF412MH/883	Dual JFET Op Amp	8-pin can	8-pin can	Yes	Pin-for-pin compatible
LT1057MH/883	LF412MH/883	Dual JFET Op Amp	8-pin can	8-pin can	Yes	Pin-for-pin compatible
LT1057AMJ8/883	LF412MJ/883	Dual JFET Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Pin-for-pin compatible
LT1057MJ8/883	LF412MJ/883	Dual JFET Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Pin-for-pin compatible
LT1058AMJ/883	LF444MD/883	Quad JFET Op Amp	14-pin Cerdip	14-pin Cerdip	Yes	Pin-for-pin compatible
LT1058MJ/883	LF444MD/883	Quad JFET Op Amp	14-pin Cerdip	14-pin Cerdip	Yes	Pin-for-pin compatible
LT1124AMJ8	CLC432AJ-QML	Dual Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Greater gain bandwidth
LT1124AMJ8	LM6142AMJ-QML	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower supply current/faster slew
LT1124MJ8	CLC432AJ-QML	Dual Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Greater gain bandwidth
LT1124MJ8	LM6142AMJ-QML	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower supply current/faster slew
LT1125MJ8	CLC415AJ-QML	Quad Op Amp	14-pin Cerdip	14-pin Cerdip	Yes	Greater gain bandwidth
LT1125AMJ8	CLC415AJ-QML	Quad Op Amp	14-pin Cerdip	14-pin Cerdip	Yes	Greater gain bandwidth
LT1126AMJ8/883	CLC428AJ-QML	Dual Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower noise; faster slew; greater gain bandwidth
LT1126MJ8/883	CLC428AJ-QML	Dual Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower noise; faster slew; greater gain bandwidth
LT1127AMJ/883	CLC414AJ-QML	Quad Low power op amp	14-pin Cerdip	14-pin Cerdip	Yes	Greater gain bandwidth; faster slew
LT1127MJ/883	CLC414AJ-QML	Quad Low power op amp	14-pin Cerdip	14-pin Cerdip	Yes	Greater gain bandwidth; faster slew
LT1190MJ8/883	LM6181J/883	Video Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Higher output current; faster slew
LT1191MJ8/883	CLC452AJ-QML	Low Power High Output Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Higher output current; greater gain bandwidth; lower power; no disable
LT1191MJ8/883	CLC410AJ-QML	Op Amp with Disable	8-pin Cerdip	8-pin Cerdip	No	Has identical shut down feature although on different pin than LT1191
LT1192MJ8/883	CLC449AJ-QML	Ultra-Wideband Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Higher output current; greater gain bandwidth; lower power; no disable
LT1192MJ8/883	CLC411AJ-QML	Op Amp with Disable	8-pin Cerdip	8-pin Cerdip	No	Has identical shut down feature although on different pin than LT1192
LT1195MJ8/883	LM6161J/883	High Speed Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower power; faster slew rate
LT1213MJ8	LM6142AMJ-QML	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Faster slew rate
LT1213AMJ8	LM6142AMJ-QML	Dual Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Faster slew rate
LT1220MJ8	LM6161J/883	High Speed Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Greater gain bandwidth and faster slew rate
LT1221MJ8	CLC406AJ-QML	High Speed Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Lower input noise voltage
LT1222MJ8	CLC425AJ-QML	Ultra Low Noise Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Much lower input noise voltage specification
LT1223MJ8/883	CLC405AJ-QML	Op Amp with Disable	8-pin Cerdip	8-pin Cerdip	Yes	Lower input I _{bias} and higher output current
LT1223MJ8/883	CLC430AJ-QML	Op Amp with Disable	8-pin Cerdip	8-pin Cerdip	Yes	Much faster slew rate
LT1227MJ8	CLC452AJ-QML	CFB Video Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Higher output current but no disable
LT1227MJ8	CLC411AJ-QML	CFB Video Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Greater gain bandwidth and identical disable feature
LT1229MJ8	LM6182AMJ/883	CFB Dual Op Amp	8-pin Cerdip	14-pin Cerdip	No	Lower input noise voltage
LT1229MJ8/883	CLC432AJ-QML	Dual Wideband Op Amp	8-pin Cerdip	8-pin Cerdip	Yes	Faster slew rate
LT1230MJ8/883	CLC415AJ-QML	Quad Low Power Op Amp	14-pin Cerdip	14-pin Cerdip	Yes	Greater gain bandwidth; faster slew rate; better differential Gain & Phase



Data Acquisition

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LTC1290xMJ/883	LM12H458MW/883	12-Bit DAS System	20-pin CERDIP	44-pin CERQUAD Gullwing	No	True 12 bit + sign conversion, more features, highly integrated; available in LCC
LTC1293xMJ/883	LM12H458MW/883	12-Bit DAS System	16-pin CERDIP	44-pin CERQUAD Gullwing	No	True 12 bit + sign conversion, more highly integrated, supports 8 channels vs. the LTC1293's 5 channels
LTC1294xMJ/883	LM12H458MW/883	12-Bit DAS System	20-pin CERDIP	44-pin CERQUAD Gullwing	No	True 12 bit + sign conversion, more features, highly integrated; available in LCC
LTC1296xMJ/883	LM12H458MW/883	12-Bit DAS System	20-pin CERDIP	44-pin CERQUAD Gullwing	No	True 12 bit + sign conversion, more features, highly integrated; available in LCC

Interface

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LTC485MJ8/883	DS16F95J/883	RS-485 Tx/Rx	8-pin CERDIP	8-pin CERDIP	Yes	Also available in surface-mount packages
LT1180MJ/883	DS14C232J/883	Dual RS232 Driver/Receiver	18-pin CERDIP	16-pin CERDIP	No	Also available in surface-mount packages
LT1280MJ/883	DS14C232J/883	Dual RS232 Driver/Receiver	18-pin CERDIP	16-pin CERDIP	No	Also available in surface-mount packages
LT1281MJ/883	DS14C232J/883	Dual RS232 Driver/Receiver	18-pin CERDIP	16-pin CERDIP	No	Also available in surface-mount packages

References

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1004MH-1.2/883	LM185BYH-1.2/883	1.2V Reference Diode	2-pin can	2-pin can	Yes	Available in surface-mount packages
LT1004MH-2.5/883	LM185BYH-2.5/883	2.5V Reference Diode	2-pin can	2-pin can	Yes	Pin-for-pin compatible
LT1009MH/883	LM136AH-2.5/883	2.5V Reference	3-pin can	3-pin can	Yes	Pin-for-pin compatible
LT1019AMH-2.5/883	LM136AH-2.5/883	2.5V Reference	8-pin can	3-pin can	No	Pin-for-pin compatible
LT1019MH-2.5/883	LM136H-2.5/883	2.5V Reference	8-pin can	3-pin can	No	Pin-for-pin compatible
LT1019AMH-5/883	LM136AH-5.0/883	5V Reference	8-pin can	3-pin can	No	Better radiation resistance
LT1019MH-5/883	LM136H-5.0/883	5V Reference	8-pin can	3-pin can	No	Better radiation resistance
LT1021BMH-5/883	LM136AH-5.0/883	5V Reference	8-pin can	3-pin can	No	Better radiation resistance
LT1021CMH-5/883	LM136AH-5.0/883	5V Reference	8-pin can	3-pin can	No	Better radiation resistance
LT1029MH/883	LM136AH-5.0/883	5V Reference	8-pin can	3-pin can	No	Better radiation resistance



Regulators/LDOs

Linear Tech Part #	National Replacement or Military Upgrade Part #	National Description	LTC Package	National Package	Pin Compatible	National's Advantage
LT1003MK/883	LM138K/883	5 Amp Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT123AK/883	LM123K/883	3 Amp Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT1020MJ/883	LP2951J/883	Micropower Regulator	8-pin Cerdip	8-pin Cerdip	No	Also available in surface-mount packages
LT117AHVK/883	LM117HVK/883	Adjustable Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT117AHVH/883	LM117HVH/883	Adjustable Regulator	3-pin can	3-pin can	Yes	Pin-for-pin compatible
LT117AK/883	LM117K/883	Adjustable Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT117AH/883	LM117H/883	Adjustable Regulator	3-pin can	3-pin can	Yes	Also available in surface-mount packages
LT137AH/883	LM137AH/883	Adjustable Regulator	3-pin can	3-pin can	Yes	Also available in surface-mount packages
LT137AK/883	LM137AK/883	Adjustable Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT137AHVH/883	LM137HVH/883	Adjustable Regulator	3-pin can	3-pin can	Yes	Pin-for-pin compatible
LT137AHVK/883	LM137HVK/883	Adjustable Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT138AK/883	LM138K/883	5 Amp Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible
LT150AK/883	LM150K/883	3A Adj. Regulator	2-pin T03 can	2-pin T03 can	Yes	Pin-for-pin compatible