

NPC Oscillator Family Cross Reference SM56xx families.

This chart shows the recommended replacements for the SM56xx families. Where there are two or more recommended choices, a decision must be made. Be sure to review the NewOsc.doc for a detailed specification table comparison.

This is the current cross reference recommendation. NPC introduced new versions of the SM5009 and SM5006 that offer lower negative resistance and slower output rise and fall times, making them a better match for retrofit /replacement applications. However, you may consider the faster clock edges as a benefit. Both options are shown where they exist.

The SM5006 data sheet will be changed in January to show operation at 3 volts up to 70 MHz.

The SM5003 (SM5021) , SM5004 (SM5022), and SM5007 offer smaller footprint that may help for new designs targeted for smaller packages.

Part	Recommended replacement
SM5603	Replace with CF5006 series
SM5610H1	Use CF5009CH1 (faster clock edges use AH1)
SM5610H1S	Use SM5009CH1 (faster clock edges use AH1)
SM5610H3	Use CF5009CH2 (faster clock edges use AH2)
SM5610H3S	Use SM5009CH2 (faster clock edges use AH2)
SM5610H5	Use CF5009CH3
SM5610H5S	Use SM5009CH3S
SM5610H7	Use CF5009CH4
SM5610H7S	Use SM5009CH4S

SM5610K1	Use CF5009CK1 (faster clock edges use AK1)	SM5617KA	Use CF5006AKA or AKB (check frequency)	SM5619H7	Use CF5009CH4
SM5610K1S	Use SM5009CK1S (faster clock edges use AK1S)	SM5617KAS	Use SM5006AKAS or AKBS (check frequency)	SM5619H7S	Use SM5009CH4S
SM5610K3	Use CF5009CK2 (faster clock edges use AK2)	SM5617KKB	Use CF5006AKB or AKC (check frequency)	SM5619K1	Use CF5009CK1 (faster clock edges use AK1)
SM5610K3S	Use SM5009CK2S (faster clock edges use AK2S)	SM5617KKB	Use SM5006AKBS or AKCS (check frequency)	SM5619K1	Use SM5009CK1S (faster clock edges use AK1S)
SM5610K5	Use CF5009CH3	SM5617KBS	Use CF5006AKC	SM5619N1	Use CF5009CN1
SM5610K5S	Use SM5009CH3S	SM5617KCS	Use SM5006AKCS	SM5619N1S	Use SM5009CN1S
SM5610K7	Use CF5009AN4	SM5617KCS	Use SM5006AKCS	SM5619N3	Use CF5009CN2
SM5610K7S	Use SM5009AN4S	SM5617KDC	Use CF5006AKC	SM5619N3S	Use SM5009CN2S
SM5610N1	Use CF5009CN1	SM5617KDS	Use SM5006AKCS	SM5619N5	Use CF5009AN3
SM5610N1S	Use SM5009CN1S	SM5617KE	Use CF5006CKD (faster clock edges use AKC or AKD)	SM5619N5S	Use SM5009AN3S
SM5610N3	Use CF5009CN2	SM5617KES	Use SM5006CKD (faster clock edges use AKC or AKD)	SM5619N7	Use CF5009AN4
SM5610N3S	Use SM5009CN2S	SM5617KF	Use CF5006AKA	SM5619N7S	Use SM5009AN4S
SM5610N5	Use CF5009AN3	SM5617KFS	Use CF5006AKAS	SM5623NA	Use CF5006ANC or AND (check frequency)
SM5610N5S	Use SM5009AN3S	SM5617NA	Use CF5006ANA or ANB (check frequency)	SM5623NAS	Use SM5006ANCS or ANDS (check frequency)
SM5610N7	Use CF5009AN4	SM5617NAS	Use SM5006ANAS or ANBS (check frequency)	SM5623NB	Use CF5006ANC or AND (check frequency)
SM5610N7S	Use SM5009AN4S	SM5617NB	Use CF5006CNC (faster clock edges use ANB)	SM5623NC	Use CF5006ANC or AND (check frequency)
SM5613H1		SM5617NBS	Use SM5006CNCS (faster clock edges use ANBS)	SM5623ND	Use CF5006CNE (faster clock edges use AND or ANE)
SM5613H1S		SM5617NC	Use CF5006CNC	SM5623NE	Use CF5006CNE (faster clock edges use AND or ANE)
SM5613K1	Use CF5006BKC	SM5617NCS	Use SM5006CNCS	SM5623NF	Use CF5006CNE
SM5613K1S	Use SM5006BKCS	SM5617ND	Use CF5006CNC	SM5623NG	Use CF5006CNE
SM5613N1	Use CF5006DNC	SM5617NDS	Use SM5006CNCS	SM5624N1	Use CF5009AL1
SM5613N1S	Use SM5006DNCS	SM5617NE	Use CF5006CND	SM5624N1S	Use SM5009AL1S
SM5614AA1	Use CF5007AA1	SM5617NES	Use SM5006CND	SM5624N3	Use CF5009AL2
SM5614AA3	Use CF5007AA2	SM5617NF	Use SM5006CNDS	SM5624N3S	Use SM5009AL2S
SM5616	Replace with CF5006 series	SM5617NFS	Use CF5006ANA	SM5624N5	Use CF5009AL3
SM5617HA		SM5619H1	Use SM5006ANAS	SM5624N5S	Use SM5009AL3S
SM5617HAS		SM5619H1S	Use CF5009CH1 (faster clock edges use AH1)	SM5624N7	Use CF5009AL4
SM5617HB		SM5619H3	Use SM5009CH1S (faster clock edges use AH1S)	SM5624N7S	Use SM5009AL4S
SM5617HBS		SM5619H3	Use CF5009CH2 (faster clock edges use AH2)	SM5626N1	Use SM5006DNE
SM5617HC		SM5619H3S	Use SM5009CH2S (faster clock edges use AH2S)	SM5626N1S	Use SM5006DNES
SM5617HCS		SM5619H5	Use CF5009CH3		
SM5617HD		SM5619H5S	Use SM5009CH3S		
SM5617HDS					
SM5617HE					
SM5617HES					