

Reconstitution

Russell 3000® Index - Deletions

Company	Symbol	Sector
ACETO CORP	ACET	Materials & Processing
ADVAXIS INC	ADX	Health Care
AILERON THERAPEUTICS	ALRN	Health Care
AKOUSTIS TECHNOLOGIES	AKTS	Technology
AMPCO-PITTSBURGH CORP	AP	Materials & Processing
ANAVEX LIFE SCIENCES	AVXL	Health Care
AQUA METALS INC	AQMS	Producer Durables
ARC DOCUMENT SOLUTIONS	ARC	Technology
ASCENT CAPITAL GROUP INC	ASCA	Producer Durables
ASTERIAS BIOTHERAPEUTICS	AST	Health Care
ATLAS FINANCIAL HOLDINGS	AFH	Financial Services
AXOVANT SCIENCES LTD	AXON	Health Care
BLUE CAPITAL REINSURANCE	BCRH	Financial Services
BRIDGEPOINT ED INC	BPI	Consumer Discretionary
BUILD A BEAR WORKSHOP	BBW	Consumer Discretionary
CELLEX THERAPEUTICS INC	CLDX	Health Care
COLLECTORS UNIVERSE INC	CLCT	Consumer Discretionary
CONATUS PHARMACEUTICALS	CNAT	Health Care
CONFORMIS INC	CFMS	Health Care
CONTANGO OIL & GAS CO	MCF	Energy
CORE MOLDING TECHN	CMT	Materials & Processing
CORINDUS VASC ROBOTICS	CVRS	Health Care
CPI CARD GROUP INC	PMTS	Financial Services
CSS INDUSTRIES INC	CSS	Consumer Discretionary
CURIS INC	CRIS	Health Care
CYBEROPTICS CORP	CYBE	Technology
DELPHI TECHNOLOGIES PLC	DLPH	Consumer Discretionary
DELTA APPAREL INC	DLA	Consumer Discretionary
DHI GROUP INC	DHX	Producer Durables
DNB FINL CORP	DNBF	Financial Services
DSP GROUP INC	DSPG	Technology
EDGE THERAPEUTICS INC	EDGE	Health Care
ELLINGTON RESIDENTIAL	EARN	Financial Services
EMCORE CORP	EMKR	Technology
ENSCO PLC	ESV	Energy
EXONE COMPANY	XONE	Producer Durables
FREDS INC	FRED	Consumer Discretionary
FTD COMPANIES INC	FTD	Consumer Discretionary
GASTAR EXPL INC	GST	Energy
GENIE ENERGY LTD	GNE	Utilities
GENOCEA BIOSCIENCES INC	GNCA	Health Care
GEOSPACE TECHNOLOGIES	GEOS	Energy
GLOBAL EAGLE ENTMT INC	ENT	Technology
GLOBALSTAR INC	GSAT	Utilities
GSI TECHNOLOGY	GSIT	Technology
GULF ISLAND FABRICATION	GIFI	Energy
HORIZON GLOBAL CORP	HZN	Consumer Discretionary
HUDSON TECHNOLOGIES INC	HDSN	Producer Durables
HUTTIG BUILDING PRODUCTS	HBP	Materials & Processing

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ICONIX BRAND GROUP INC	ICON	Consumer Discretionary
IDT CORP	IDT	Utilities
INSPIRED ENTERTAINMENT	INSE	Consumer Discretionary
INTEVAC INC	IVAC	Technology
JONES ENERGY INC	JONE	Energy
LIBBEY INC	LBY	Consumer Discretionary
LIBERTY TAX INC	TAX	Consumer Discretionary
LIFEWAY FOODS INC	LWAY	Consumer Staples
LSI INDUSTRIES INC	LYTS	Materials & Processing
MATINAS BIOPHARMA HLDG	MTNB	Health Care
MEDLEY MANAGEMENT INC	MDLY	Financial Services
MERRIMACK PHARMACEUTICAL	MACK	Health Care
MICROVISION INC	MVIS	Technology
NAVIOS MARITIME ACQUIS	NNA	Producer Durables
NAVIOS MARITIME HOLDINGS	NM	Producer Durables
NOVELION THERAPEUTICS	NVLN	Health Care
OBALON THERAPEUTICS INC	OBLN	Health Care
OLD POINT FINL CORP	OPOF	Financial Services
ONCOCYTE CORPORATION	OCX	Health Care
ORCHIDS PAPER PRODS COMP	TIS	Consumer Staples
OTONOMY INC	OTIC	Health Care
OWENS RLTY MTG INC	ORM	Financial Services
PACIFIC ETHANOL INC	PEIX	Energy
PARKER DRILLING CO	PKD	Energy
PCM INC	PCMI	Technology
PIXELWORKS INC	PXLW	Technology
PROTAGONIST THERAPEUTICS	PTGX	Health Care
PROVIDENT FINL HLDGS INC	PROV	Financial Services
QUANTUM CORP	QTM	Technology
QUOTIENT LIMITED	QTNT	Health Care
RADISYS CORP	RSYS	Technology
RAFAEL HOLDINGS	RFL	Financial Services
RANGER ENERGY SERVICES	RNGR	Energy
REALNETWORKS INC	RNWK	Technology
RED VIOLET	RDVT	Technology
RESTORATION ROBOTICS INC	HAIR	Health Care
REVOLUTION LIGHTING TECH	RVLT	Technology
ROADRUNNER TRNSN SVCS	RRTS	Producer Durables
RUBICON PROJ INC	RUBI	Technology
SALEM MEDIA GROUP INC	SALM	Consumer Discretionary
SEQUENTIAL BRANDS GROUP	SQBG	Consumer Discretionary
STARTEK INC	SRT	Producer Durables
STRONGBRIDGE BIOPHARMA	SBBP	Health Care
TINTRI	TNTR	Technology
TOWNSQUARE MEDIA INC	TSQ	Consumer Discretionary
TREVENA INC	TRVN	Health Care
TWO RIVER BANCORP	TRCB	Financial Services
VBI VACCINES INC	VBIV	Health Care
VERSARTIS INC	VSAR	Health Care

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VITAMIN SHOPPE INC	VSI	Consumer Discretionary
VIVEVE MEDICAL INC	VIVE	Health Care
VOXX INTERNATIONAL CORP	VOXX	Consumer Discretionary
VTV THERAPEUTICS INC	VTVT	Health Care
XBIOTECH INC	XBIT	Health Care
ZYNERBA PHARMACEUTICALS	ZYNE	Health Care



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