

**Alternative Trading Systems with Form ATS
on File with the SEC as of November 30, 2018**

Full Name of Alternative Trading System (as provided in item 1.A. of Form ATS)	Name(s) Under Which Business Is Conducted (as provided in item 1.B. of Form ATS)	City and State of Alternative Trading System (as provided in item 1.F. of Form ATS)
American Ledger ATS	American Ledger ATS LLC	Moorpark, CA
Aqua Securities L.P.		New York, NY
Arbor Research and Trading LLC	Clarity BidRate Alternative Trading System	Barrington, IL
ATS-1	Morgan Stanley & Co. LLC	New York, NY
ATS-4	Morgan Stanley & Co. LLC	New York, NY
ATS-6	Morgan Stanley & Co. LLC	New York, NY
Automated Equity Finance Markets, Inc.	AQS, EquiLend Clearing Services (ECS)	New York, NY
AX Trading, LLC		New York, NY
Barclays ATS	LX	New York, NY
BGC Financial L.P.		New York, NY
BIDS Trading, L.P.	BIDS Trading	New York, NY
BlockCross	Instinet, LLC	New York, NY
BondVision US		New York, NY
BrokerTec	BrokerTec Americas LLC	New York, NY
CitiBLOC	CitiBLOC is owned and operated by Citigroup Global Markets, Inc. (CGMI)	New York, NY
CITICROSS	Citi Cross is owned and operated by Citigroup Global Markets Inc. (CGMI)	New York, NY
CODA Markets, Inc	CODA & CODA ATS	Glenview, IL
Credit Suisse Securities (USA) LLC - Crossfinder	Crossfinder	New York, NY
Creditex Securities Corporation	ICE BondPoint	New York, NY
Creditex Securities Corporation	ICE Credit Trade	New York, NY
Dash ATS		Chicago, IL
DBOT ATS, LLC		Wilmington, DE
DBVX		New York, NY
Dealerweb, Inc.	Dealerweb	Jersey City, NJ
Deutsche Bank Securities, Inc.	SuperX	New York, NY
eBX LLC	LevelL ATS	Boston, MA
Elixium NA	Elixium NA, DBA of TFS Derivatives, LLC	New York, NY
EquiLend LLC		New York, NY
FixCenter, LLC		Long Island City, NY
FNC AG Stock, LLC		Grand Forks, ND
GFI Securities LLC	CreditMatch (LATG)	New York, NY
GFI Securities LLC		New York, NY
GFI Securities LLC	FENICS Credit (FNIX)	New York, NY
GLMX Technologies, LLC		New York, NY
Global OTC	Archipelago Trading Services, Inc.	Chicago, IL
HTDonline	Hartfield, Titus & Donnelly, LLC	Jersey City, NJ

ICAP Trading Systems	ICAP Corporates LLC	New York, NY
IDX Markets	IDX Markets, LLC	New York, NY
Instinct X		New York, NY
Instinet Continuous Block Crossing System (CBX)	Instinet, LLC	New York, NY
Instinet, LLC	Instinet Crossing	New York, NY
Interactive Brokers LLC	IBKR ATS	Greenwich, CT
Intelligent Cross LLC		Stamford, CT
JPB-X	JPB-X is owned and operated by J.P. Morgan Securities LLC ("JPMS")	New York, NY
JPM-X	JPM-X is owned and operated by J.P. Morgan Securities LLC ("JPMS")	New York, NY
JSVC LLC		Honolulu, HI
Lending Club Trading Market	Folio Investments, Inc.	McLean, VA
Liquidnet Fixed Income ATS		New York, NY
Liquidnet H2O ATS		New York, NY
Liquidnet Negotiation ATS		New York, NY
Luminex Trading & Analytics LLC		Boston, MA
Magma ATS	Tor Brokerage LLC	North Bergen, NJ
Maps ECN	Marco Polo Securities Inc.	New York, NY
MarketAxess Corporation Mid-X Trading System	Mid-X System; Mid-X	New York, NY
MBS Source eTrading, Inc.	MBS Marketplace; MBS eTrading	Mercer Island, WA
MTS BondsPro		New York, NY
MuniAxis ATS		Wellesley, MA
Nasdaq Fixed Income	Execution Access, LLC	New York, NY
National Financial Services LLC	CrossStream, CrossStream BLOX SM (BLOCK Liquidity Opportunity Cross)	Boston, MA
North Capital Private Securities Corp.	Public Private Execution Network, PPEX, PPEX ATS	Salt Lake City, UT
NPM Securities, LLC		New York, NY
NXP	Dash Financial Technologies LLC	Chicago, IL
Orchard ATS	Orchard Platform Markets LLC	New York, NY
OTC Link ECN		New York, NY
OTC Link LLC	OTC Link ATS	New York, NY
POSIT		New York, NY
PRO Securities, LLC		New York, NY
REALCADRE LLC		New York, NY
Rialto Trading Network LLC		New York, NY
Sageworks Capital, LLC	CFX Markets and OpenFinance Network	New York, NY
SharesPost Financial Corporation		San Francisco, CA
SIGMA X2	Goldman, Sachs & Co. (GSCO) is the broker-dealer operator of the GSCO ATS	New York, NY
Spot Quote LLC		Austin, TX
Spread Zero LLC	Spread Zero or Spread Zero ATS	New York, NY
Structured Credit Connection		New York, NY
Templum Markets LLC	Templum Markets	New York, NY

TMC Bonds, LLC		New York, NY
TP Trading Systems	Tullet Prebon Financial Services LLC	New York, NY
Tradeweb Direct LLC	Tradeweb Direct	New York, NY
Trumid ATS		New York, NY
UBS ATS	UBS Securities LLC	New York, NY
Ustocktrade	Ustocktrade Securities, Inc.	Newton, MA
Variable Investment Advisors, Inc. ATS (VIA-ATS)	www.AGSTOCKTRADE.COM, www.LIQUIDITYMAKER.COM	Sioux Falls, SD
Venovate Marketplace Inc.		Cardiff, CA
Virtu MatchIt	Virtu MatchIt ATS; MatchIt; Virtu MatchIt a division of Virtu Americas LLC	New York, NY
Virtu Night Market Alternative Trading System	Virtu Night Market System; Virtu Night Market; VNMS	New York, NY
XE	Weeden & Co. LP	Greenwich, CT
Zanbato ATS	ZX	Mountain View, CA

Ceased Operations

Full Name of Alternative Trading System (as provided in item 1.A. of Form ATS)	Name(s) Under Which Business Is Conducted (as provided in item 1.B. of Form ATS)	City and State of Alternative Trading System (as provided in item 1.F. of Form ATS)
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