

Bullish Breakout Screener Prompt

Objective

Create a comprehensive technical analysis screener to identify bullish breakout opportunities within a specific portfolio of 66 stocks. The screener should identify stocks showing strong bullish momentum with multiple confirming technical indicators.

Technical Criteria for Bullish Breakout

1. Simple Moving Average (SMA) Breakouts

- **Requirement:** Stock price must break above ALL three key SMAs:
- 10-day SMA (short-term momentum)
- 50-day SMA (medium-term trend)
- 200-day SMA (long-term trend)
- **Confirmation:** Current price should be above all three SMAs simultaneously
- **Timeframe:** Analyze on 3-month or longer timeframe for sustained momentum

2. MACD Buy Signal

- **Signal Type:** MACD line crossing above signal line (bullish crossover)
- **Additional Confirmation:** MACD histogram turning positive
- **Preferred:** MACD crossing above zero line for stronger signal
- **Timeframe:** Daily MACD on 3-month+ chart

3. RSI Momentum Confirmation

- **Threshold:** RSI > 60 (indicating strong bullish momentum)
- **Optimal Range:** RSI between 60-80 (strong but not overbought)
- **Avoid:** RSI > 80 (potentially overbought, higher risk)

4. Volume Confirmation

- **Requirement:** Breakout must occur on above-average volume
- **Measurement:** Current volume > 20-day average volume
- **Strength Indicator:** Volume spike of 1.5x+ average during breakout
- **Sustainability:** Consistent volume support on subsequent days

5. Recent High Breakout

- **Pattern:** Stock breaking above recent resistance levels
- **Timeframe:** Breaking 52-week high, 6-month high, or significant resistance
- **Visual Confirmation:** Price breaking above dotted resistance line (as shown in FMFC example)
- **Follow-through:** Sustained price action above breakout level

Portfolio Holdings to Analyze

Analyze the following 66 stocks from the portfolio:

Technology & AI Sector:

- GOOGL, MSFT, NVDA, TSLA, SHOP, DOCN, SUPX, SOUN, BBAI, INTC, NXPI, SMH

Biotech & Healthcare:

- TGTX, NKTR, QNTM, INMB, INKT, CGEM, ARTL, ASPN, CORZ

Fintech & Financial:

- HOOD, SOFI, RILY, PLTR, OPEN

Crypto & Blockchain:

- RIOT, WULF, BMNR, BTCM, CORZ

Growth & Emerging:

- SNOW, CRWV, DFDV, ALAB, LIDR, VRT, CCLD, SHIM

Quantum & Advanced Tech:

- QS, QUBT, QBTS, QLGN, KTOS

Other Holdings:

- AMZN, ARKK, CHWY, ORCL, CLS, MGNI, NEGG, HSAI, NOTV, FFAI, DJT, APPF, GOVX, DVLT, IAG, AGH, ATGL, LQDA, PROK, BKYI, CRDO, CRCL, APLD

Screening Implementation Requirements

Data Sources

- Use Yahoo Finance API or similar reliable financial data provider
- Ensure real-time or end-of-day data for accurate analysis
- Include historical data for SMA and technical indicator calculations

Scoring System

Create a weighted scoring system:

- **SMA Breakout:** 25 points (all three SMAs broken)
- **MACD Signal:** 20 points (bullish crossover + positive histogram)
- **RSI Momentum:** 20 points (RSI 60-80 range)
- **Volume Confirmation:** 20 points (above-average volume)
- **Recent High Breakout:** 15 points (breaking resistance levels)

Total Possible Score: 100 points

Minimum Qualifying Score: 70 points (must meet most criteria)

Output Format

For each qualifying stock, provide:

1. **Stock Symbol & Company Name**
2. **Current Price & % Change**
3. **Technical Scores:**
4. SMA Status (10/50/200-day positions)
5. MACD Signal (crossover date, current values)
6. RSI Level (current reading)
7. Volume Ratio (current vs. average)
8. Recent High Status (breakout level, % above)
9. **Overall Score** (out of 100)
10. **Risk Assessment** (Low/Medium/High)
11. **Entry Recommendation** (Buy/Watch/Wait)

Alert Conditions

Flag stocks that meet these high-priority conditions:

- **Golden Cross:** 50-day SMA crossing above 200-day SMA
- **Volume Surge:** 3x+ average volume on breakout day
- **Multi-timeframe Confirmation:** Bullish on daily, weekly, and monthly charts
- **Sector Momentum:** Multiple stocks in same sector showing breakouts

Risk Management Parameters

Position Sizing Recommendations

- **High Score (90-100):** Up to 5% portfolio allocation
- **Medium Score (80-89):** Up to 3% portfolio allocation

- **Qualifying Score (70-79):** Up to 2% portfolio allocation

Stop-Loss Levels

- **Aggressive:** 5% below entry price
- **Conservative:** Below nearest SMA support level
- **Trailing Stop:** 10% trailing stop once 15% profit achieved

Time Horizon

- **Short-term:** 1-3 months momentum play
- **Medium-term:** 3-6 months trend following
- **Long-term:** 6+ months for fundamental growth stories

Example Analysis Format

SYMBOL: FMFC (Example from chart provided)

Company: First Merchants Corporation

Current Price: \$8.44 (+17.13%)

Technical Analysis:

SMA Breakout: Price above 10/50/200 SMAs (25/25 points)

MACD Signal: Bullish crossover confirmed (20/20 points)

⚠ RSI Level: 52.13 - Below 60 threshold (0/20 points)

Volume: 1028% of average volume (20/20 points)

Recent High: Breaking above \$7.67 resistance (15/15 points)

Overall Score: 80/100 (QUALIFYING)

Risk Level: Medium

Recommendation: BUY **with** 3% allocation

Stop Loss: \$7.60 (10% below entry)

Target: \$9.50-10.00 (next resistance zone)

Implementation Notes

Technical Indicator Calculations

- **SMA:** Simple moving average over specified periods
- **MACD:** 12-day EMA - 26-day EMA, with 9-day signal line
- **RSI:** 14-day Relative Strength Index
- **Volume:** 20-day average volume for comparison

Chart Pattern Recognition

- Look for cup-and-handle patterns
- Flag and pennant breakouts
- Ascending triangle completions
- Double bottom reversals with volume confirmation

Market Context Considerations

- Overall market trend (SPY, QQQ direction)
- Sector rotation patterns
- Economic calendar events
- Earnings season timing

Automation Features

Real-time Monitoring

- Continuous scanning during market hours
- Alert system for new breakouts
- Portfolio performance tracking
- Risk metric updates

Backtesting Capability

- Test screener performance over historical periods
- Optimize scoring weights based on results
- Validate entry/exit timing strategies
- Calculate risk-adjusted returns

Integration Options

- Export results to trading platforms
- Email/SMS alert notifications
- Portfolio management system integration
- Performance analytics dashboard

This screener should identify the highest-probability bullish breakout opportunities within your portfolio while maintaining appropriate risk management protocols. The multi-factor approach ensures that only stocks with strong technical confirmation across multiple indicators will qualify for consideration.