ARCANA XVI

FOR THREE RETUNED SYNTHESIZERS

KYLE GANN

1998

Arcana XVI **(1998)**

When Joan Tower asked if I would write a piece for her 60th birthday concert, the "Tower" card of the Tarot deck - major arcana number XVI - flashed into my mind. In most decks the card shows a stone tower being struck by lightning, as bricks fly off and two people, a man and a woman, fall out of windows near the top. Drawing the Tower card indicates that Everything You Know Is Wrong, that you're about to have a shake-up in your life that will expand your field of consciousness and show you that you've been operating on too narrow an understanding of things. Joan Tower often has that effect on people, students and colleagues both. In Arcana XVI I tried to slowly capture that effect; the piece at first seems so simple, couched in perfectly familiar chords, but soon more complex tunings enter and vastly expand the potential pitch field. I perversely used 24 pitches to the octave partly because Joan once told me she didn't like quarter-tone music, although this uneven scale is far from quarter-tone:

Pitch:											
C	**Db7**	**Db-**	**D**	**Eb7**	**Eb**	**Eb^-**	**E**	**F7+**	**F**	**F+**	**Gb7**
Ratio:											
1/1	**21/20**	**16/15**	**9/8**	**7/6**	**6/5**	**11/9**	**5/4**	**21/16**	**4/3**	**27/20**	**7/5**
Cents:											
0	**84**	**112**	**204**	**267**	**316**	**347**	**386**	**471**	**498**	**520**	**583**

Pitch:											
Gb^-	**G**	**G^-**	**Ab**	**Ab^-**	**A**	**Bbb7**	**Bb7**	**Bb**	**Bb^-**	**B**	**Cb^-**
Ratio:											
22/15	**3/2**	**55/36**	**8/5**	**44/27**	**5/3**	**42/25**	**7/4**	**9/5**	**11/6**	**15/8**	**88/45**
Cents:											
663	**702**	**734**	**814**	**845**	**884**	**898**	**969**	**1018**	**1049**	**1088**	**1161**

Although the scale isn't quarter-tone, there are triads in-between other triads that sneak ominously between, say, E-flat major and E minor. Scored for three synthesizers, *Arcana XVI* is my first just-intonation work for live ensemble and without a prerecorded track. The work is dedicated, of course, to Joan.

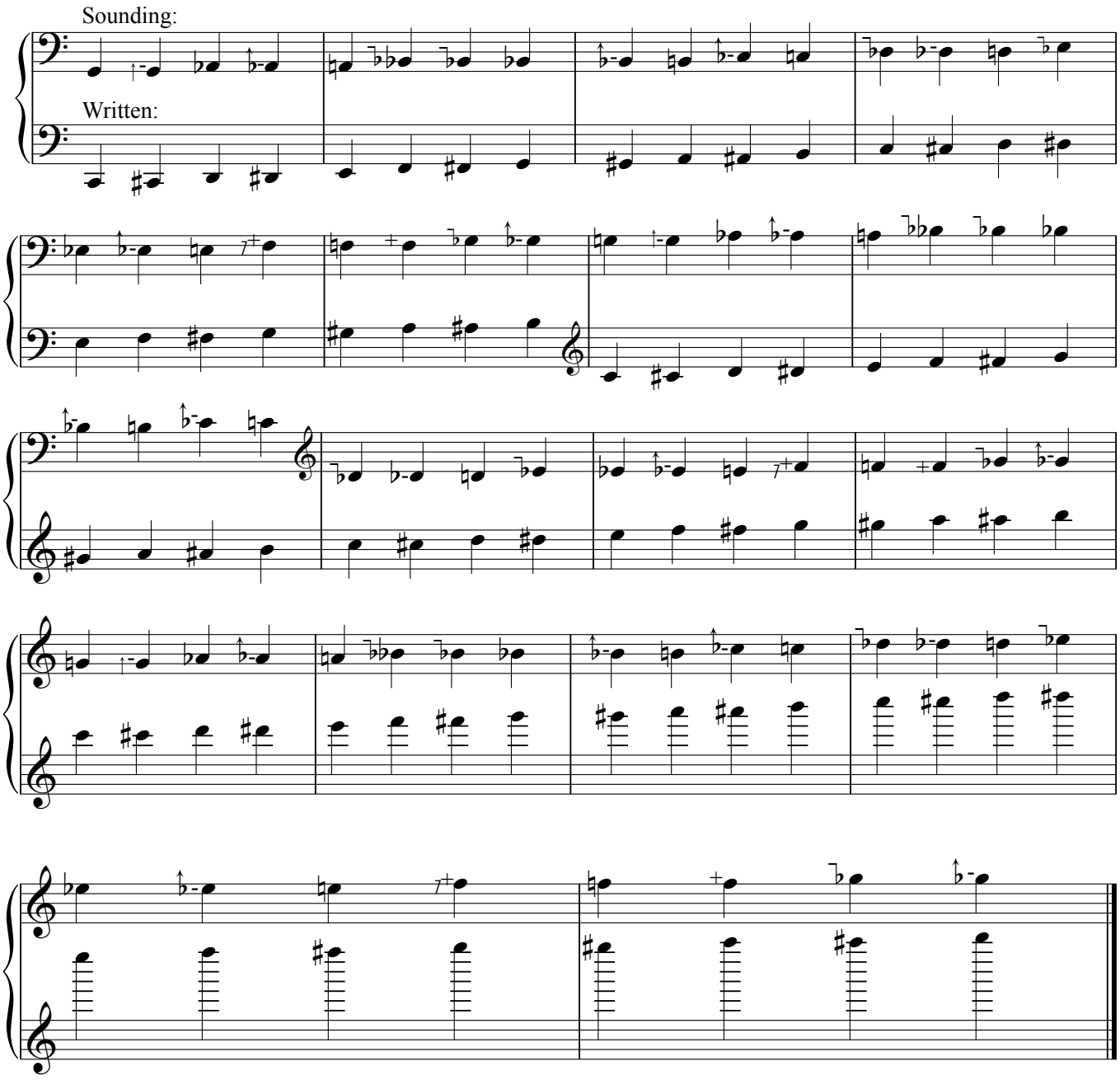
Kyle Gann

Arcana XVI - Tuning

Key	Actual Pitch	Ratio	Cents above Tonic
C1	G	3/2	702
C#1	G^-	55/36	734
D1	Ab	8/5	814
D#1	Ab^-	44/27	845
E1	A	5/3	884
F1	Bbb7	42/25	898
F#1	Bb7	7/4	969
G1	Bb	9/5	1018
G#1	Bb^-	11/6	1049
A1	B	15/8	1088
A#1	Cb^-	88/45	1161
B1	C	1/1	0
C2	Db7	21/20	84
C#2	Db-	16/15	112
D2	D	9/8	204
D#2	Eb7	7/6	267
E2	Eb	6/5	316
F2	Eb^-	11/9	347
F#2	E	5/4	386
G2	F7+	21/16	471
G#2	F	4/3	498
A2	F+	27/20	520
A#2	Gb7	7/5	583
B2	Gb^-	22/15	663
C3	G	3/2	702
C#3	G^-	55/36	734
D3	Ab	8/5	814
D#3	Ab^-	44/27	845
E3	A	5/3	884
F3	Bbb7	42/25	898
F#3	Bb7	7/4	969
G3	Bb	9/5	1018
G#3	Bb^-	11/6	1049
A3	B	15/8	1088
A#3	Cb^-	88/45	1161
B3	C	1/1	0
C4	Db7	21/20	84
C#4	Db-	16/15	112
D4	D	9/8	204
D#4	Eb7	7/6	267
E4	Eb	6/5	316

F4	Eb^-	11/9	347
F#4	E	5/4	386
G4	F7+	21/16	471
G#4	F	4/3	498
A4	F+	27/20	520
A#4	Gb7	7/5	583
B4	Gb^-	22/15	663
C5	G	3/2	702
C#5	G^-	55/36	734
D5	Ab	8/5	814
D#5	Ab^-	44/27	845
E5	A	5/3	884
F5	Bbb7	42/25	898
F#5	Bb7	7/4	969
G5	Bb	9/5	1018
G#5	Bb^-	11/6	1049
A5	B	15/8	1088
A#5	Cb^-	88/45	1161
B5	C	1/1	0
C6	Db7	21/20	84
C#6	Db-	16/15	112
D6	D	9/8	204
D#6	Eb7	7/6	267
E6	Eb	6/5	316
F6	Eb^-	11/9	347
F#6	E	5/4	386
G6	F7+	21/16	471
G#6	F	4/3	498
A6	F+	27/20	520
A#6	Gb7	7/5	583
B6	Gb^-	22/15	663

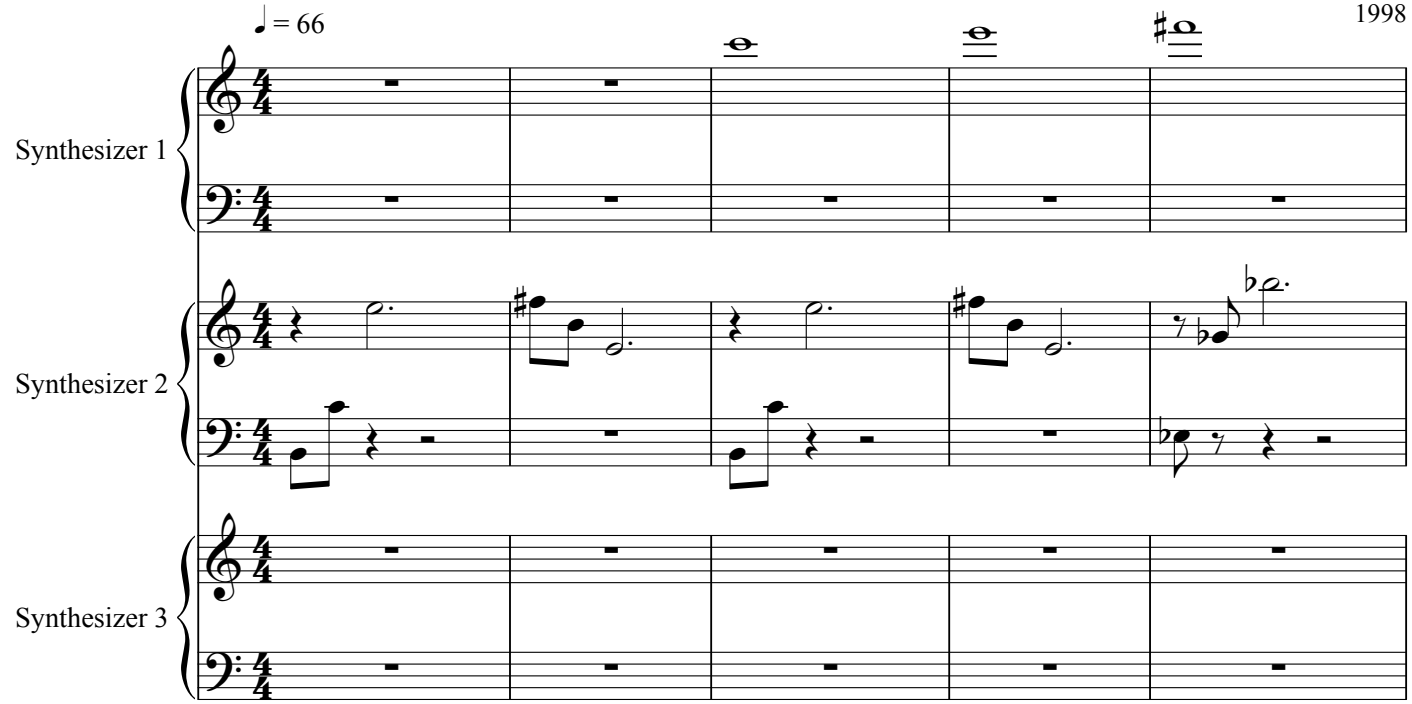
Arcana XVI: Pitch Key

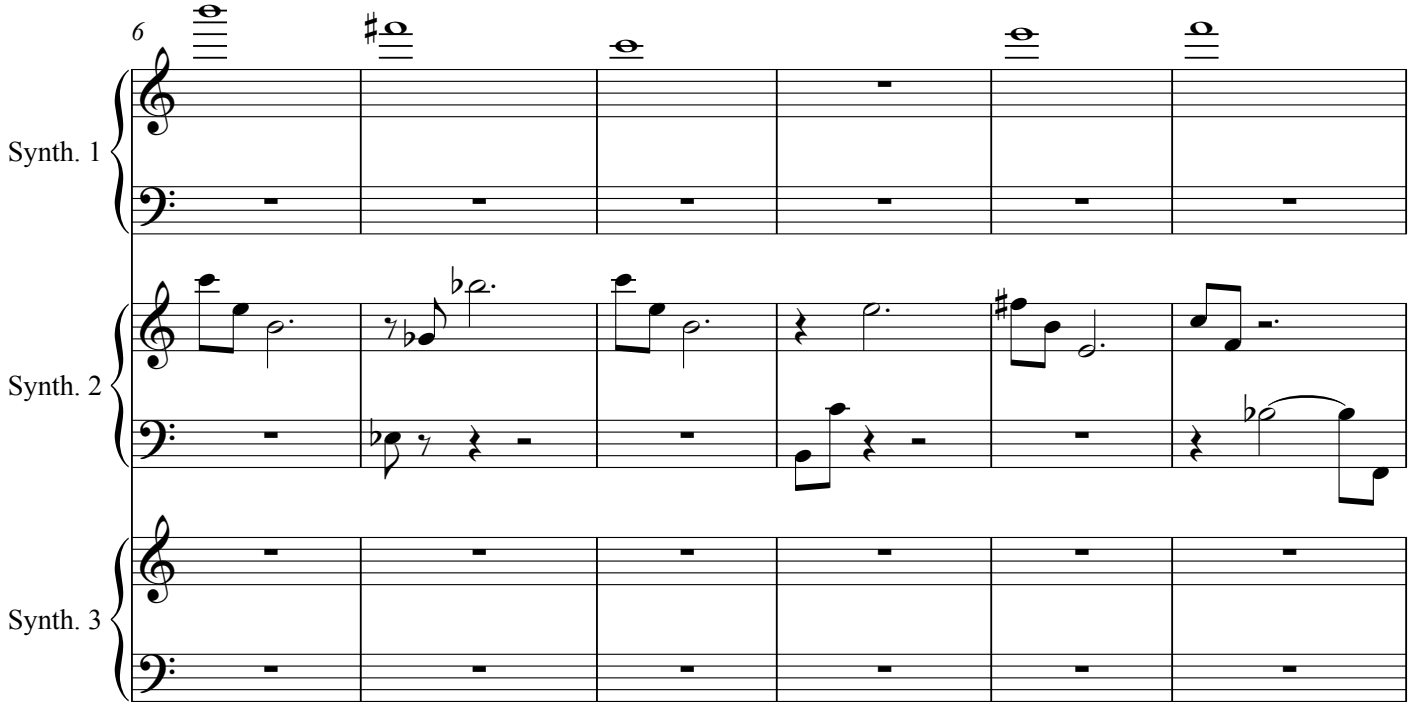


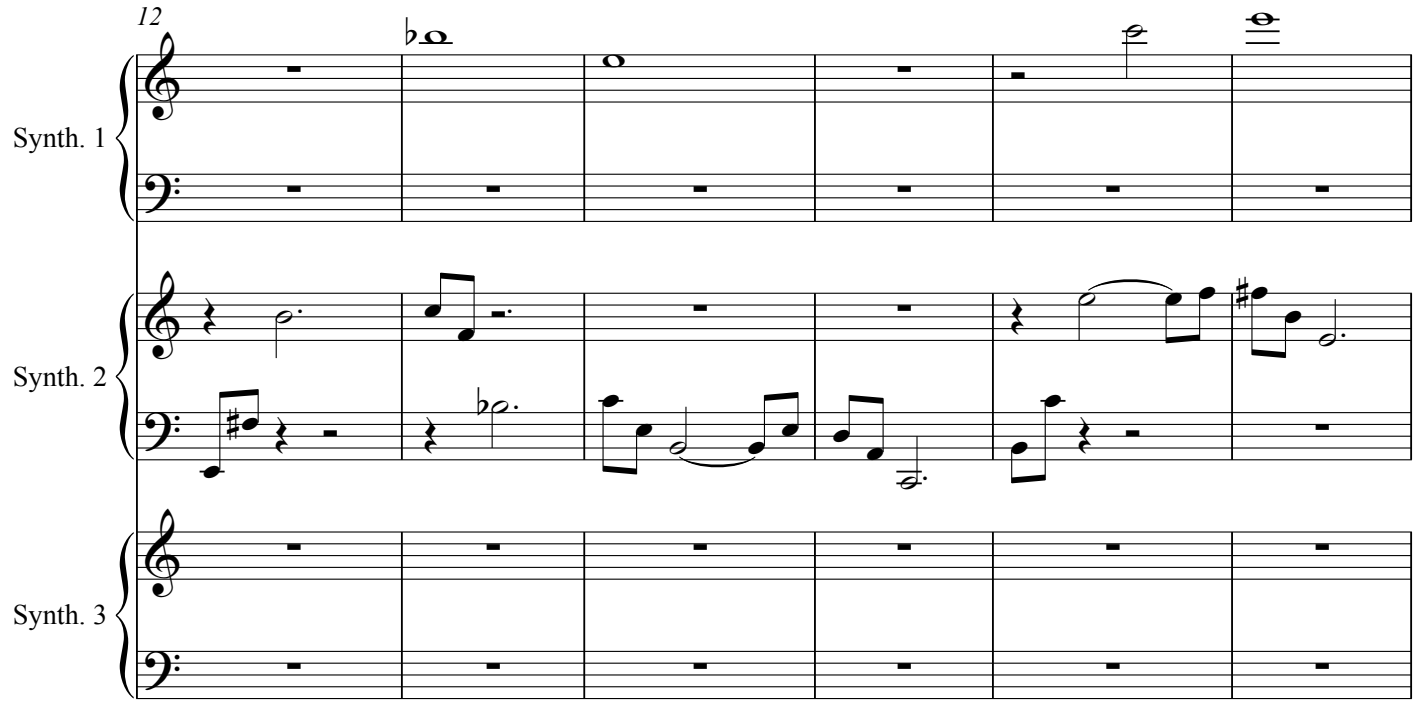
To Joan Tower

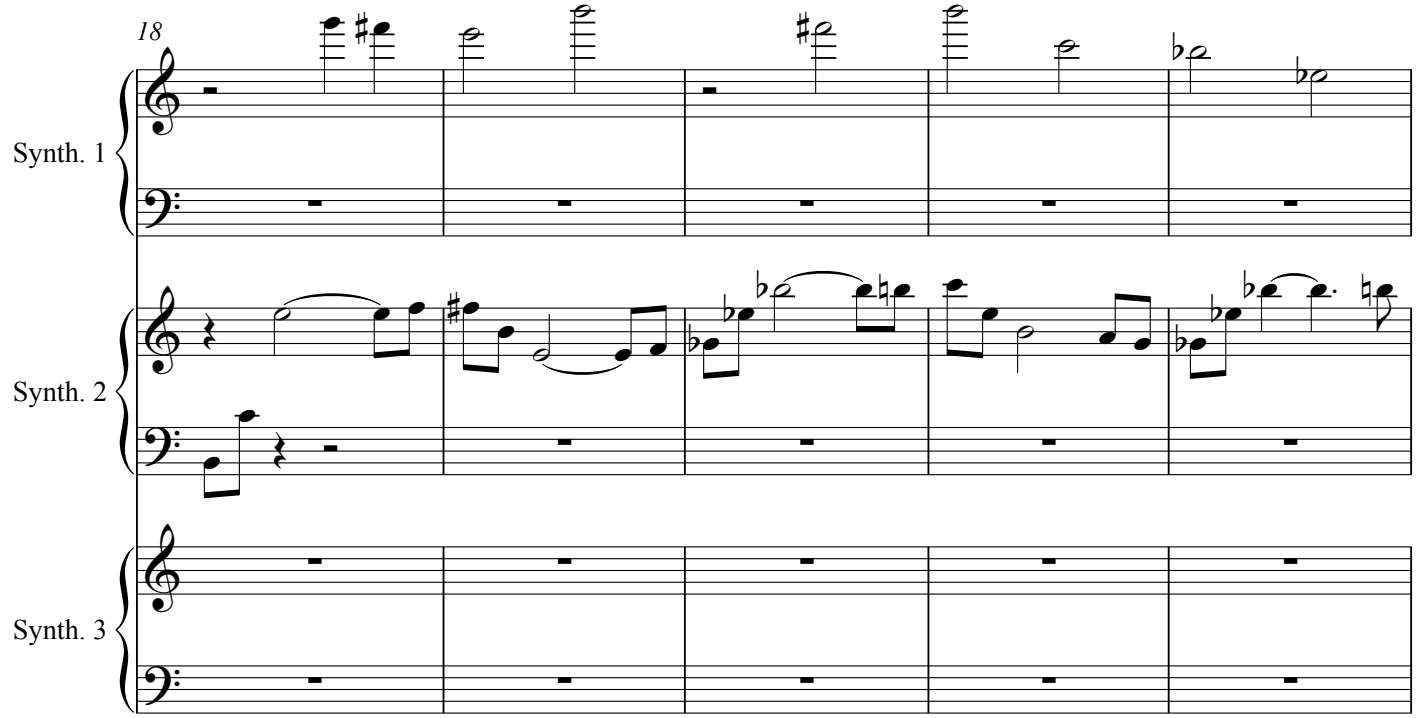
Arcana XVI

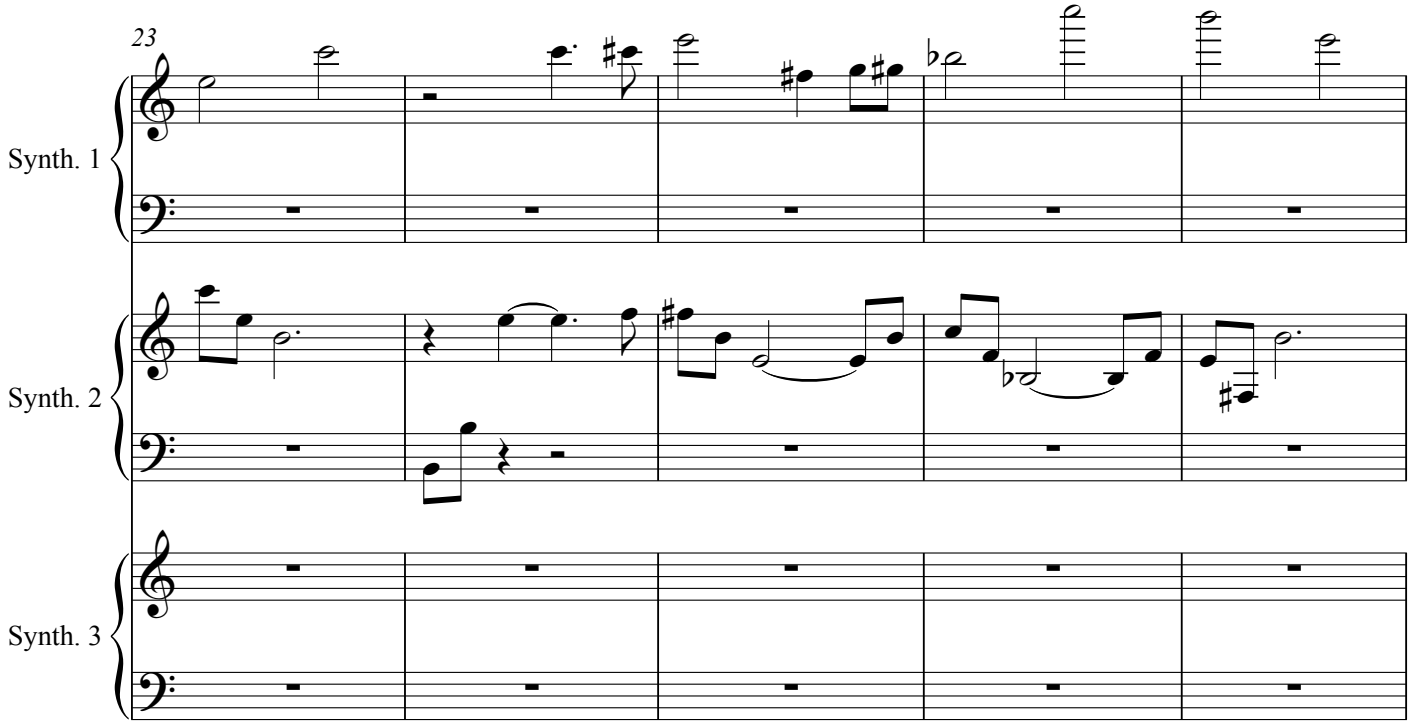
Kyle Gann
1998

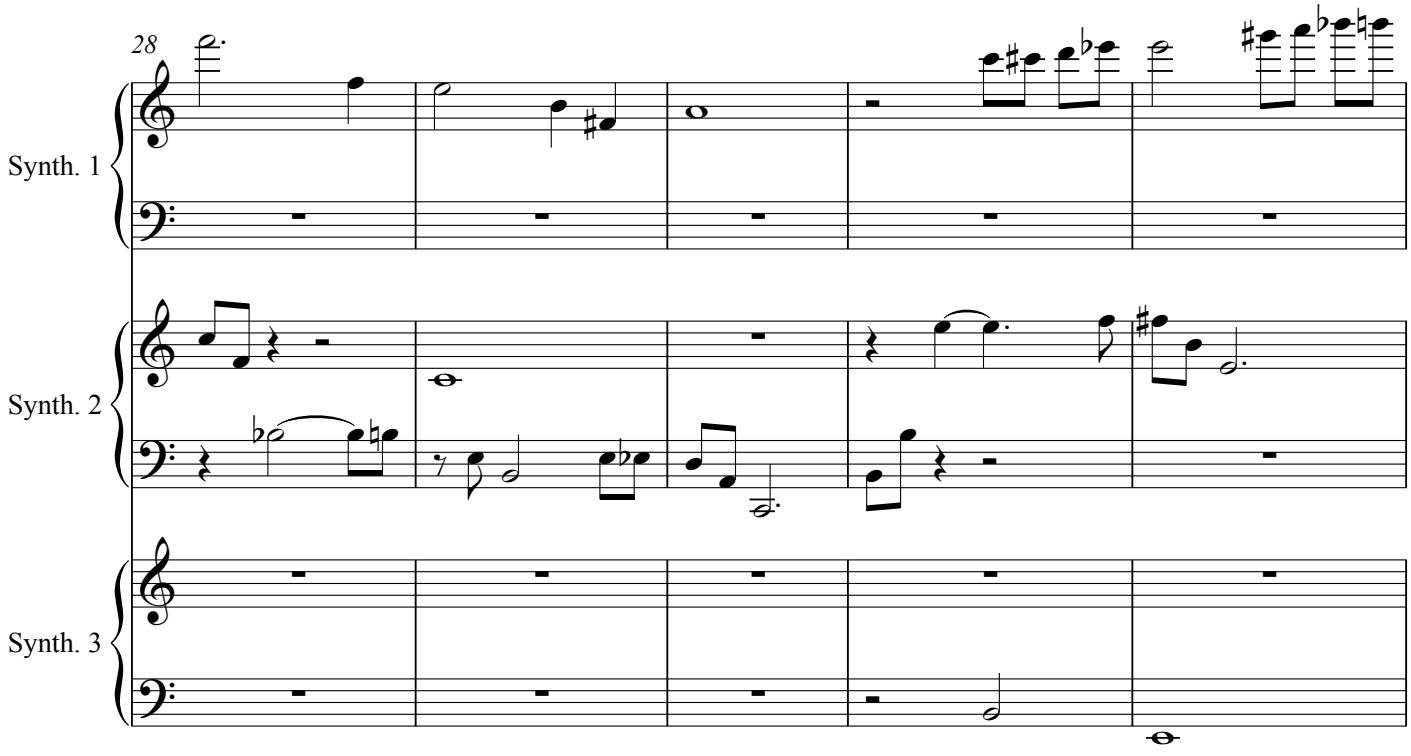


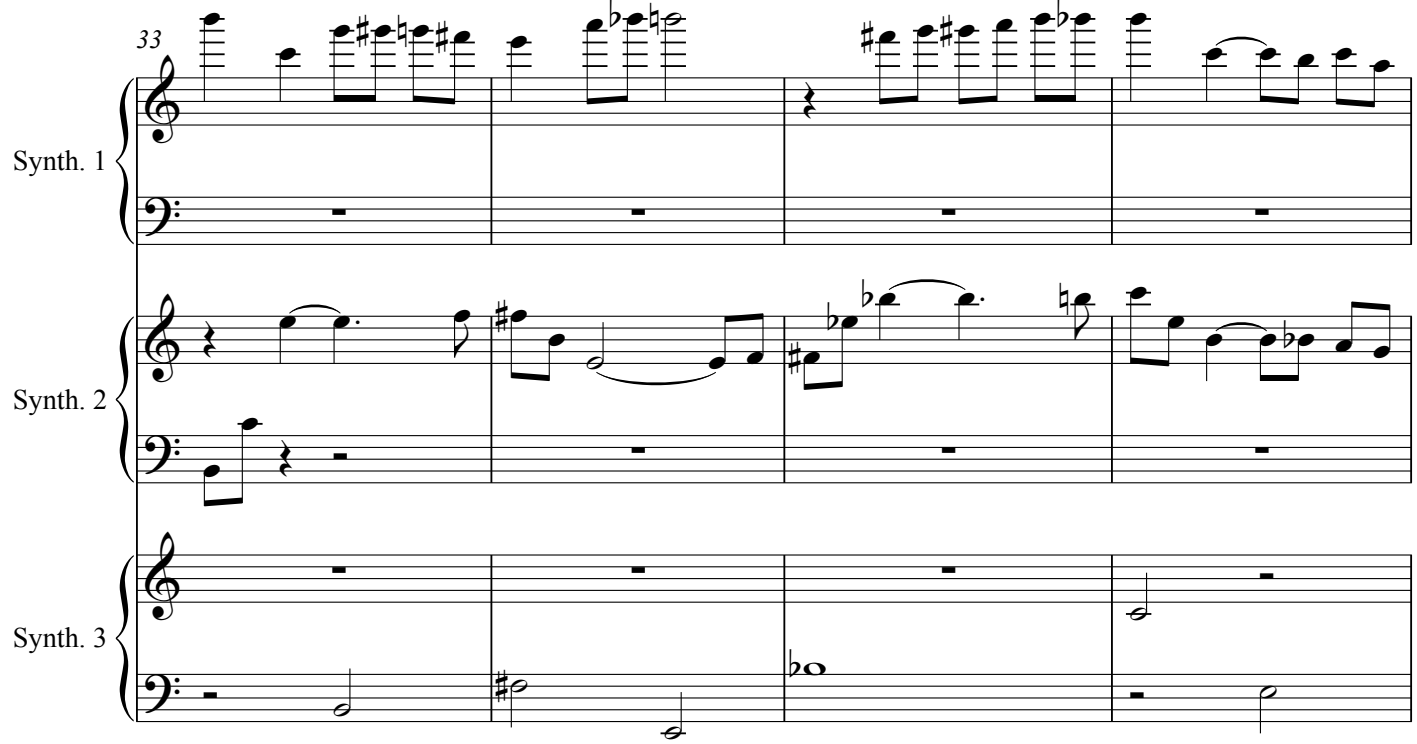


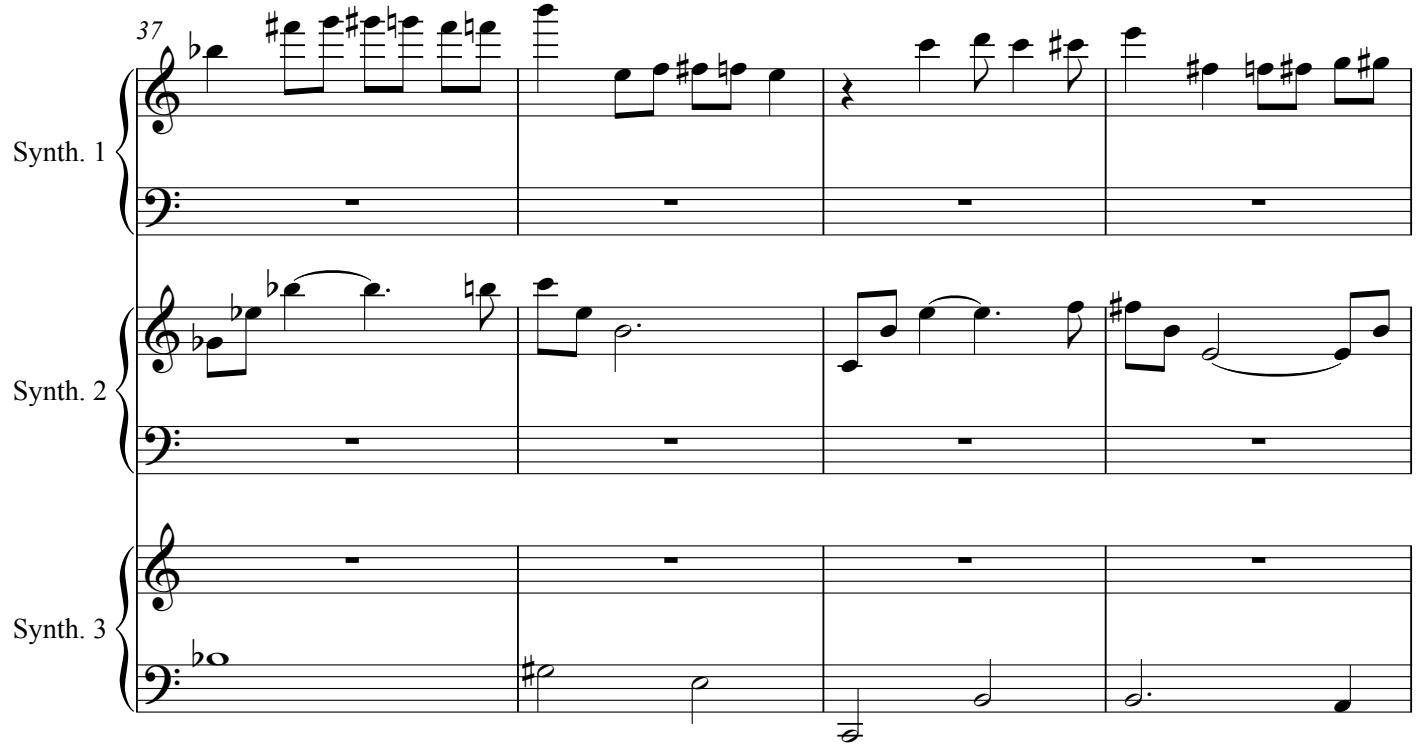

12
Synth. 1
Synth. 2
Synth. 3

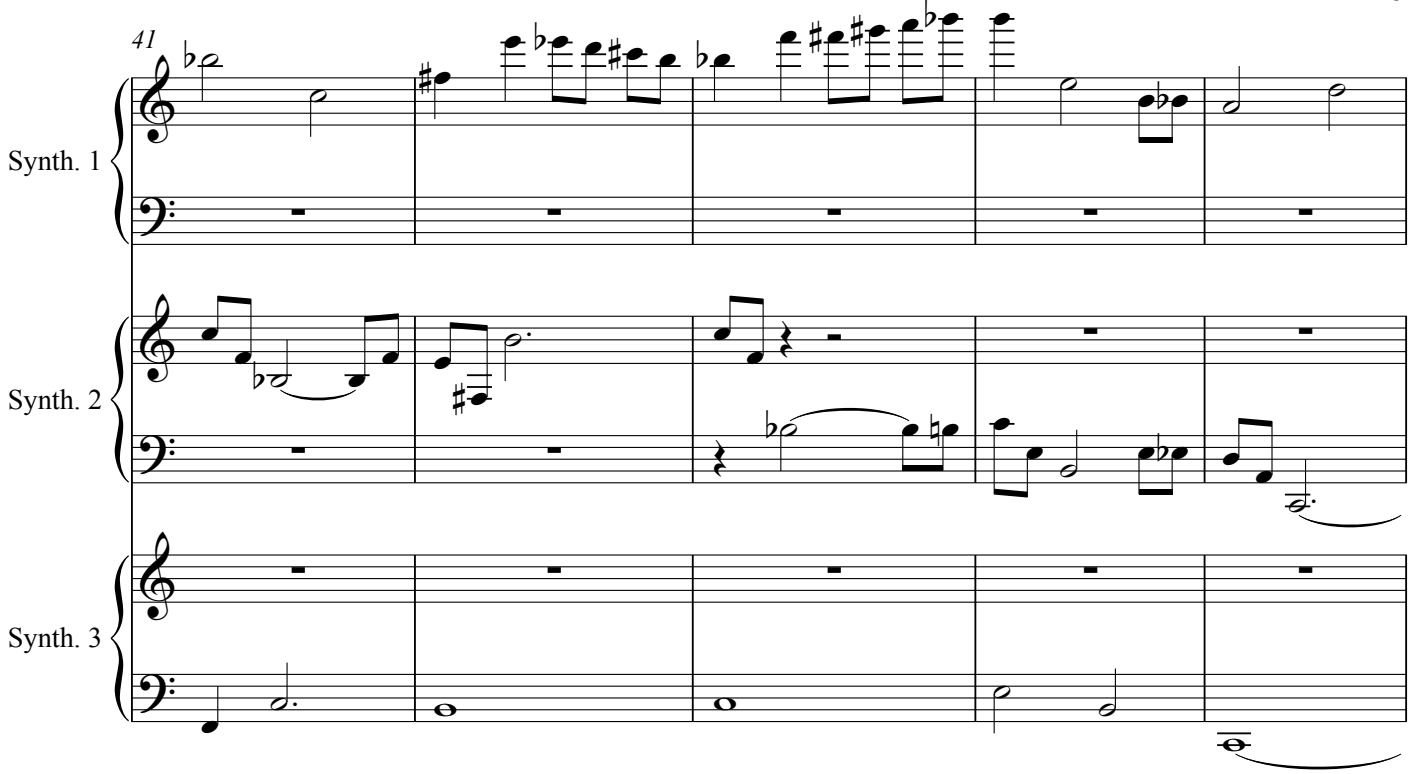

18
Synth. 1
Synth. 2
Synth. 3

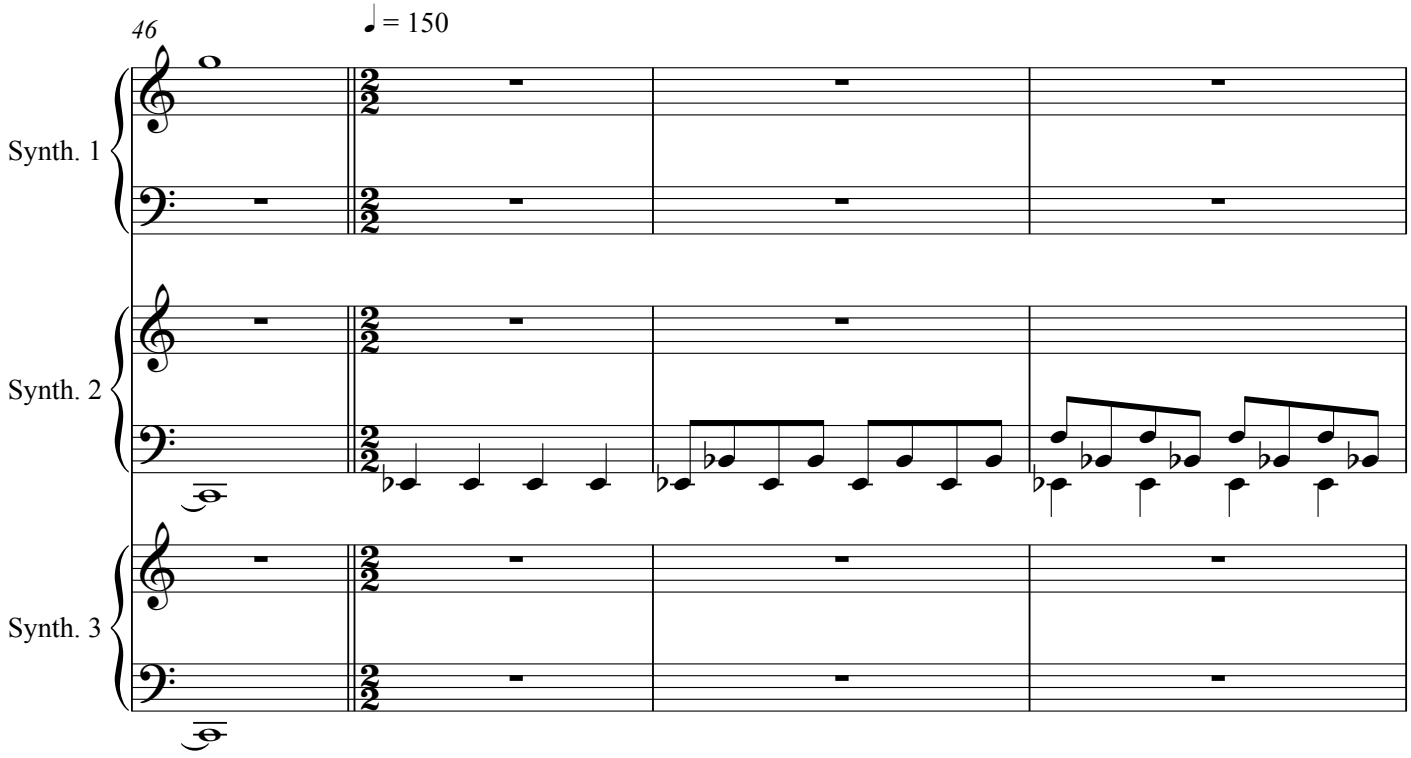

23
Synth. 1
Synth. 2
Synth. 3

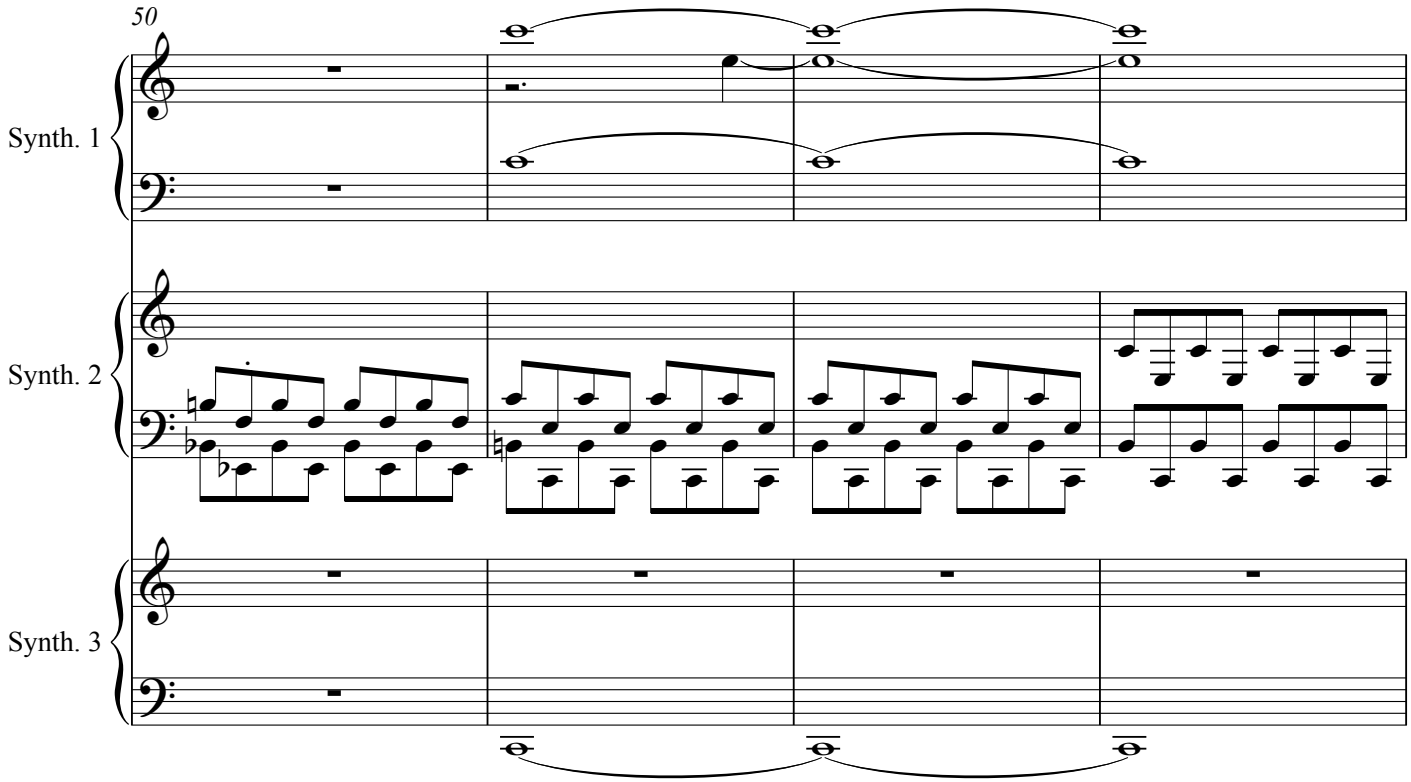

28
Synth. 1
Synth. 2
Synth. 3

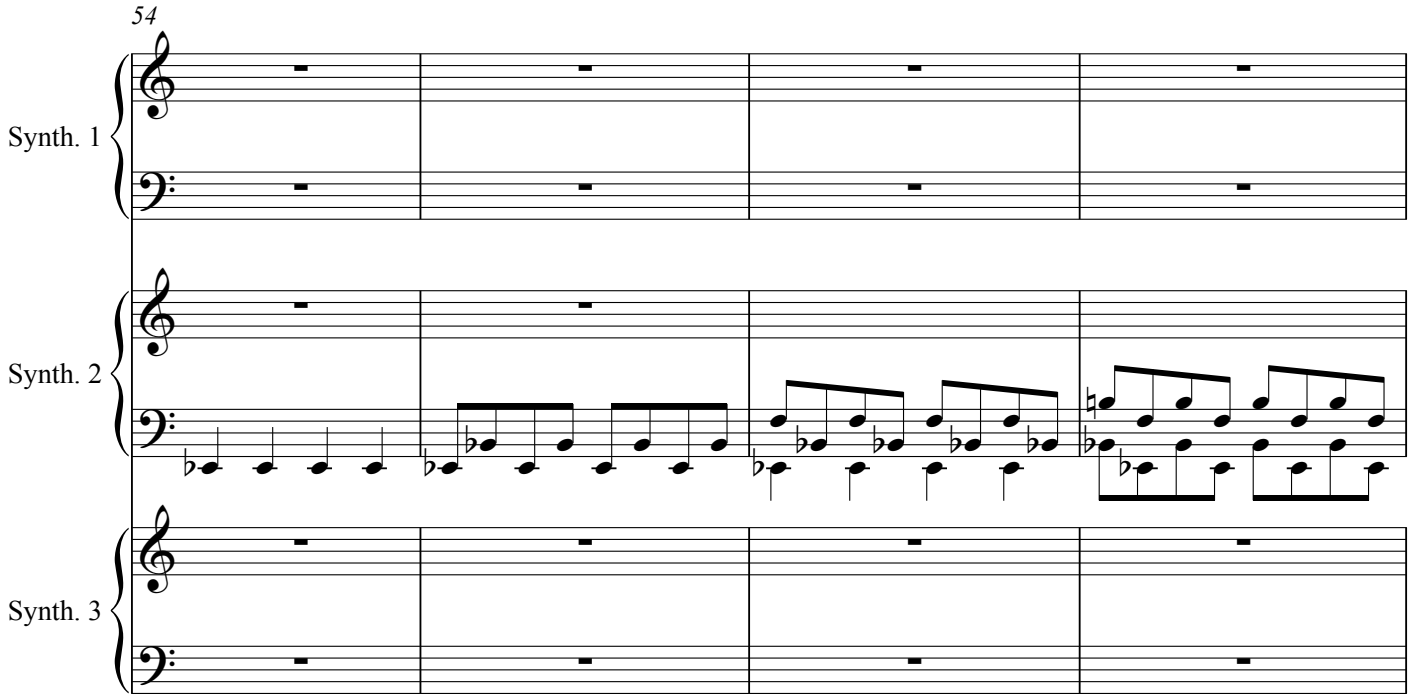

33
Synth. 1
Synth. 2
Synth. 3

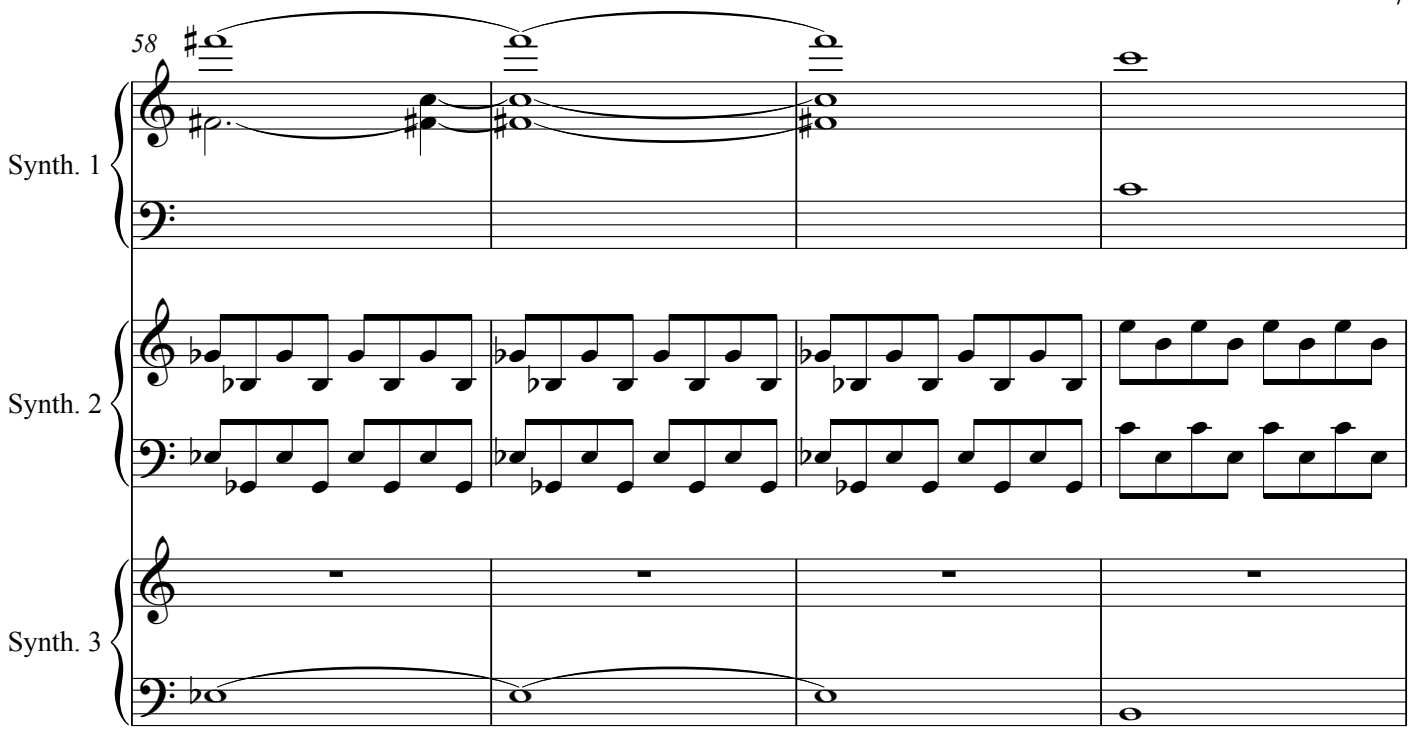

37
Synth. 1
Synth. 2
Synth. 3

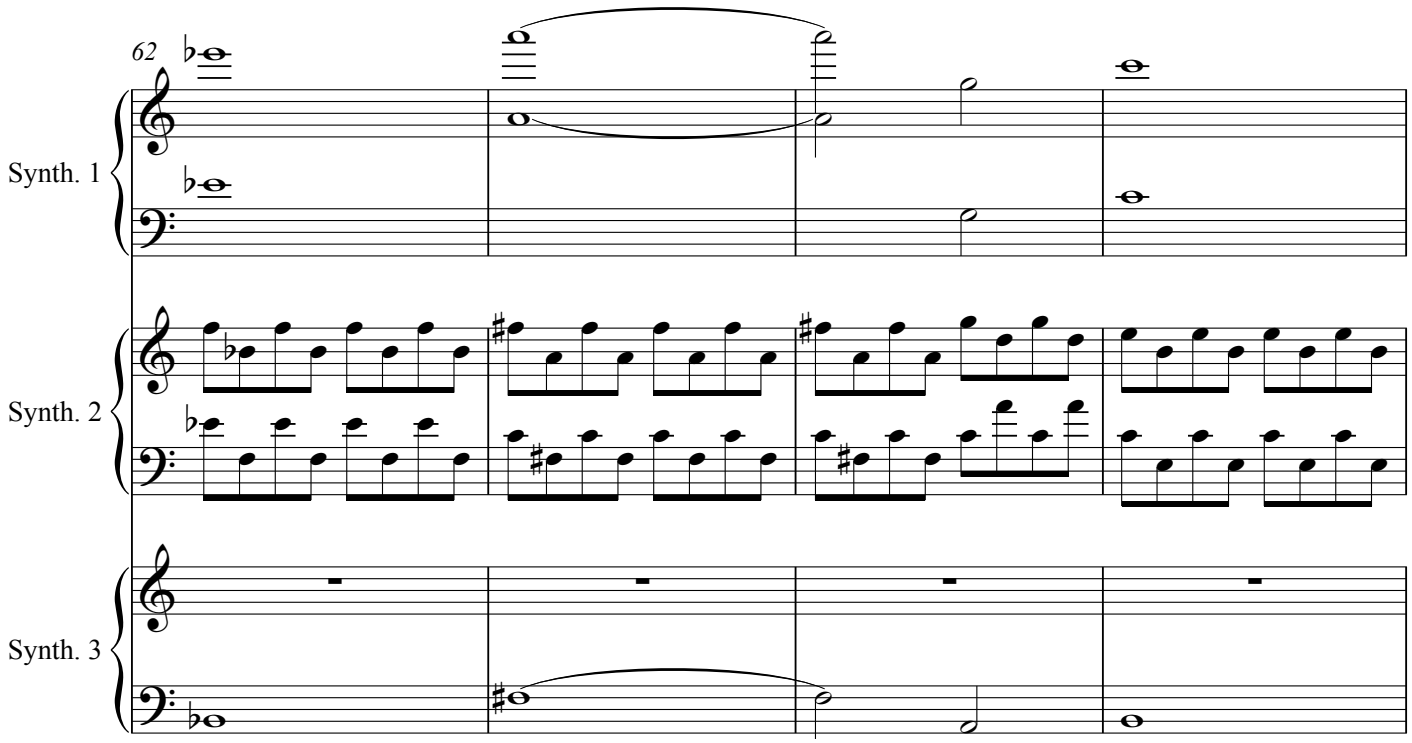

41
Synth. 1
Synth. 2
Synth. 3

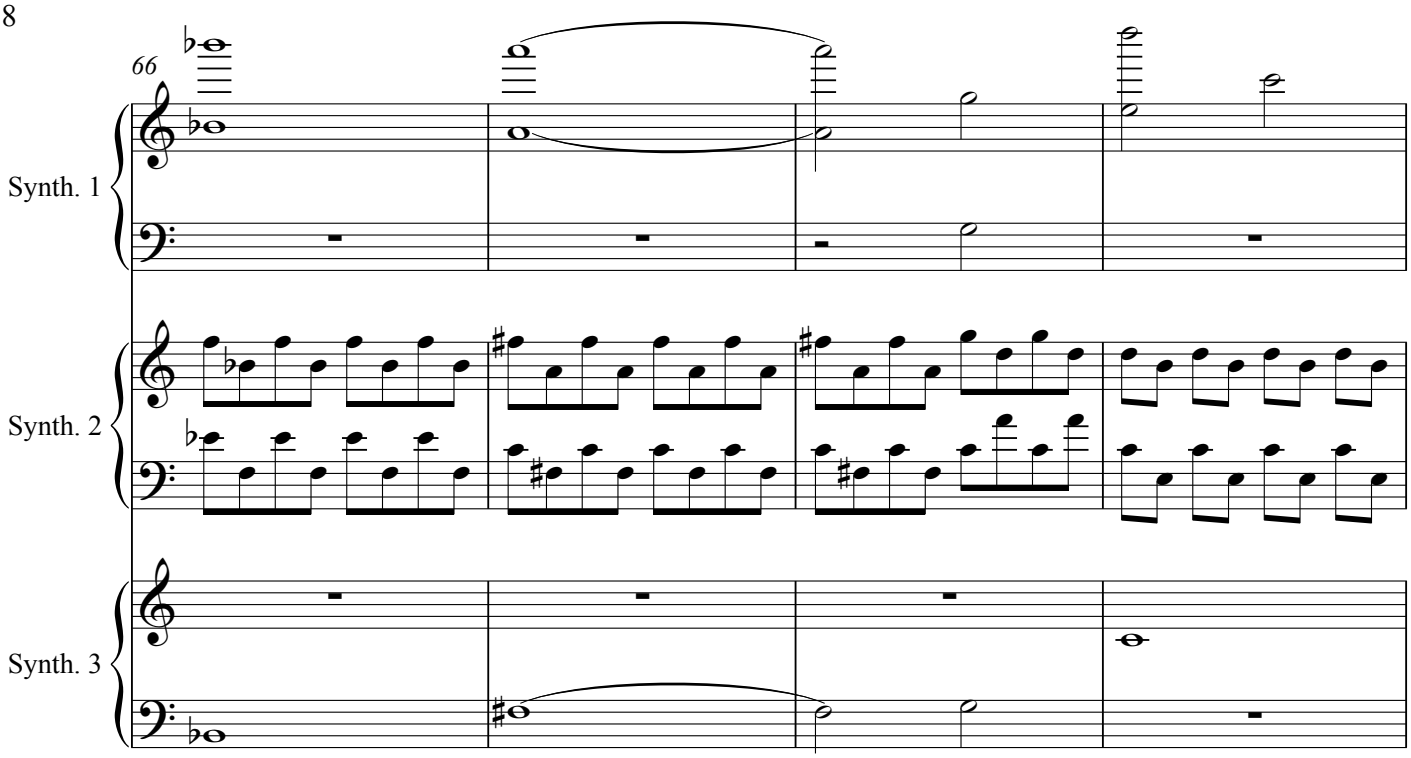

46
♩ = 150
Synth. 1
Synth. 2
Synth. 3

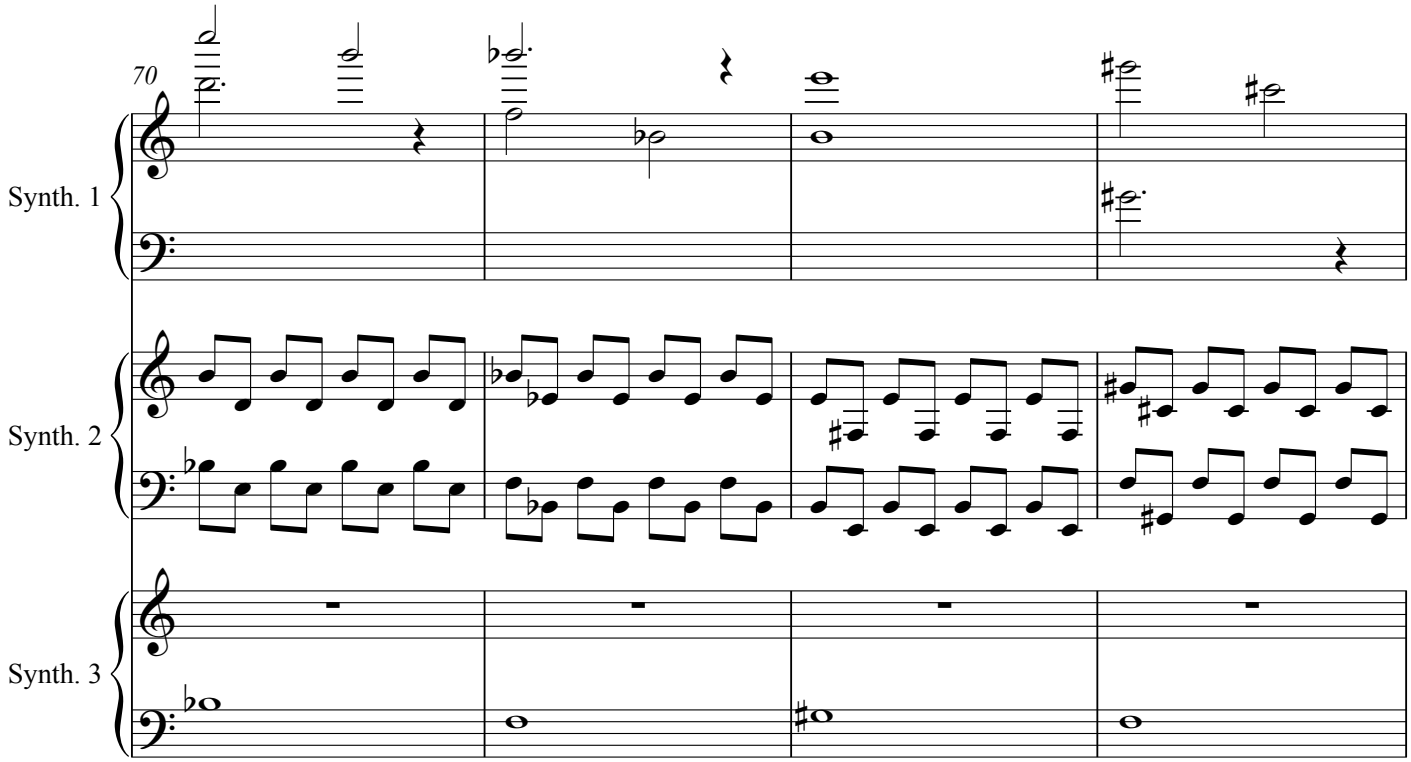

50
Synth. 1
Synth. 2
Synth. 3

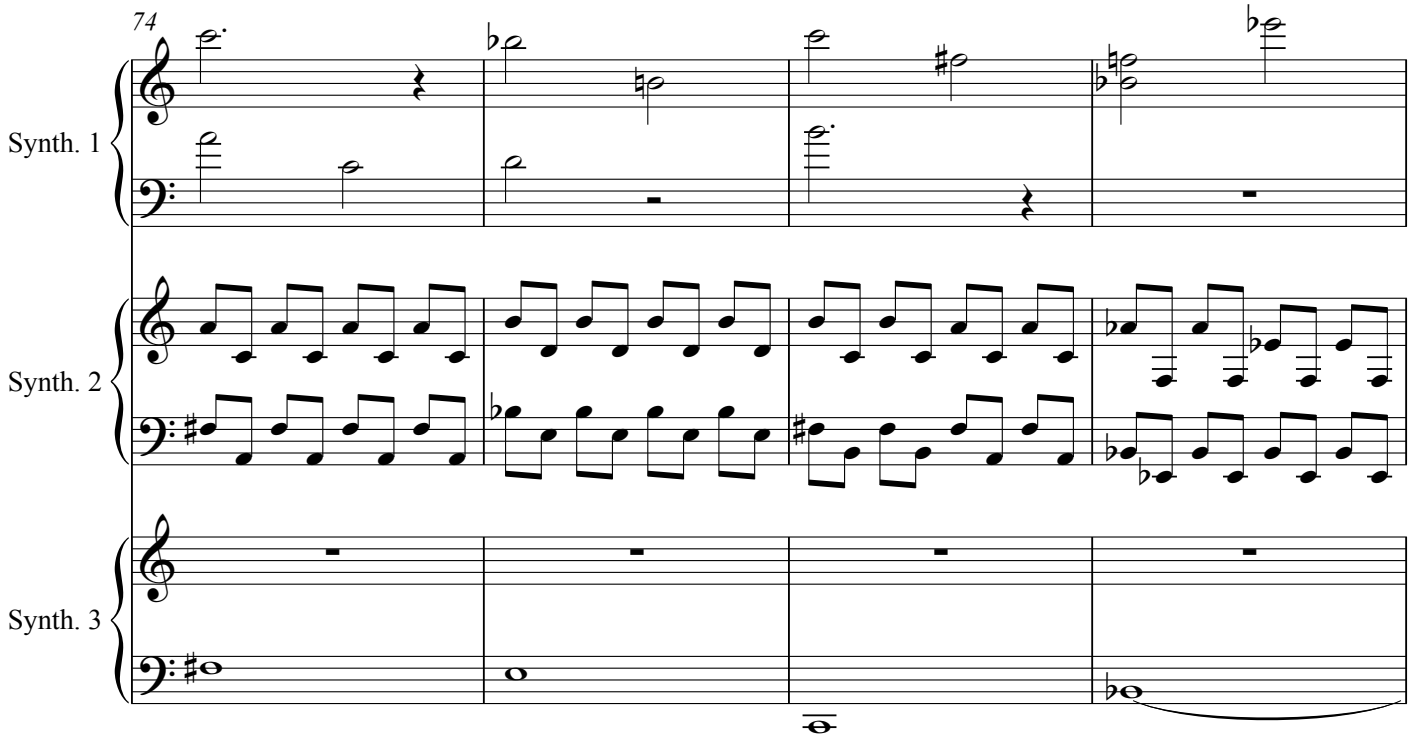

54
Synth. 1
Synth. 2
Synth. 3

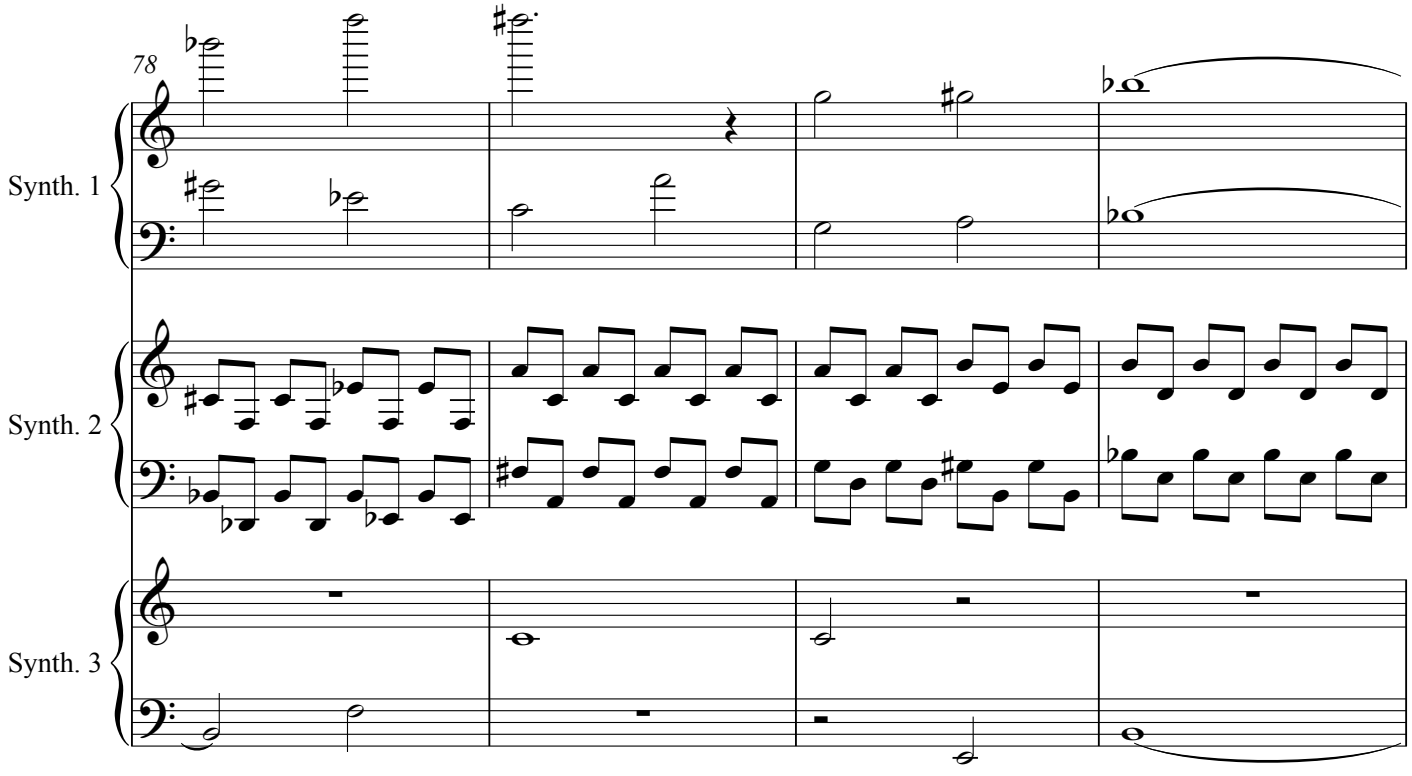

58
Synth. 1
Synth. 2
Synth. 3

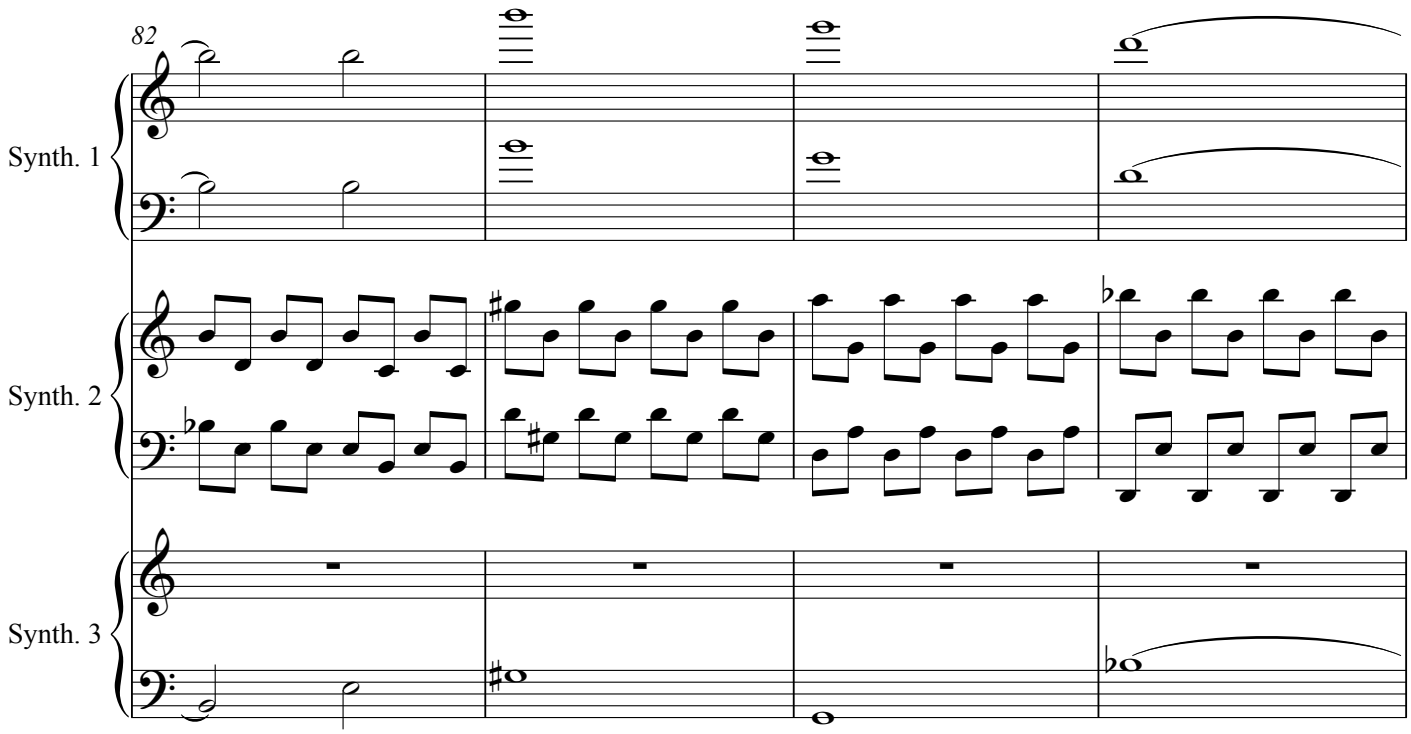

62
Synth. 1
Synth. 2
Synth. 3

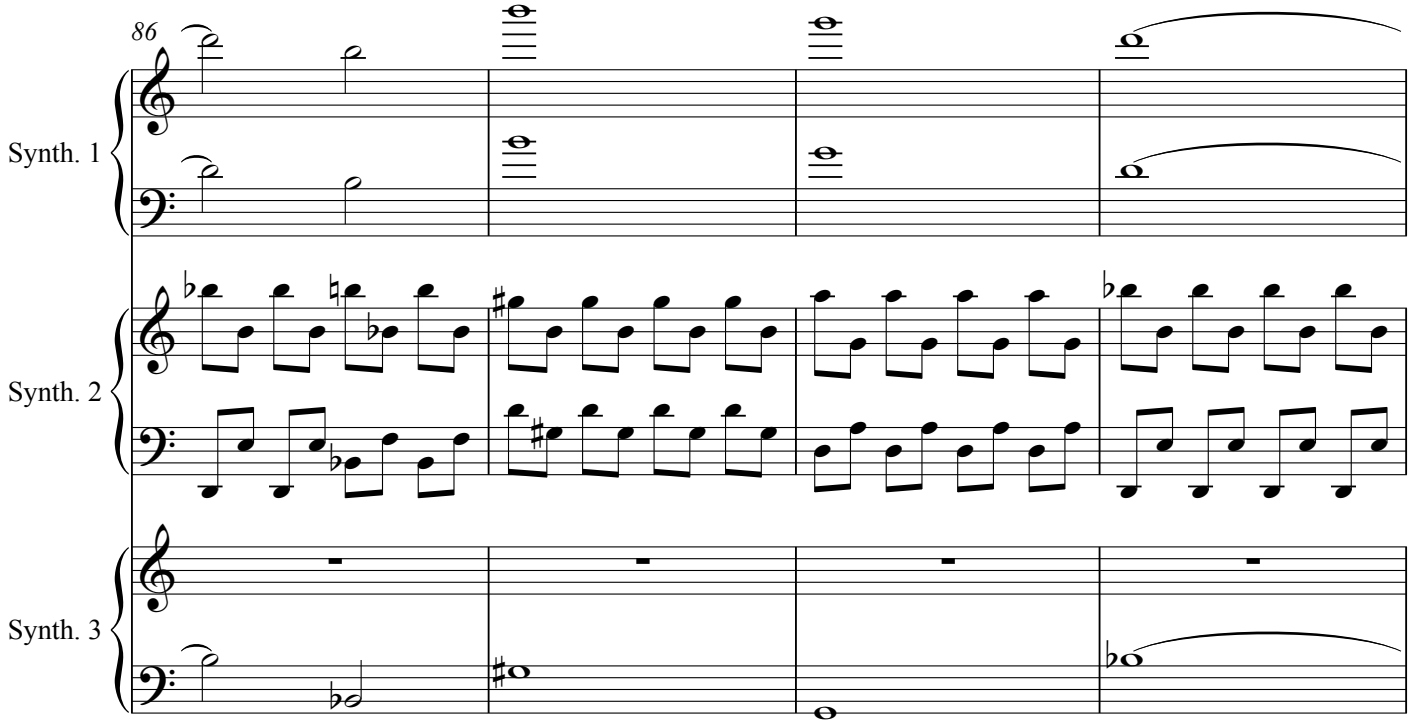

66
Synth. 1
Synth. 2
Synth. 3

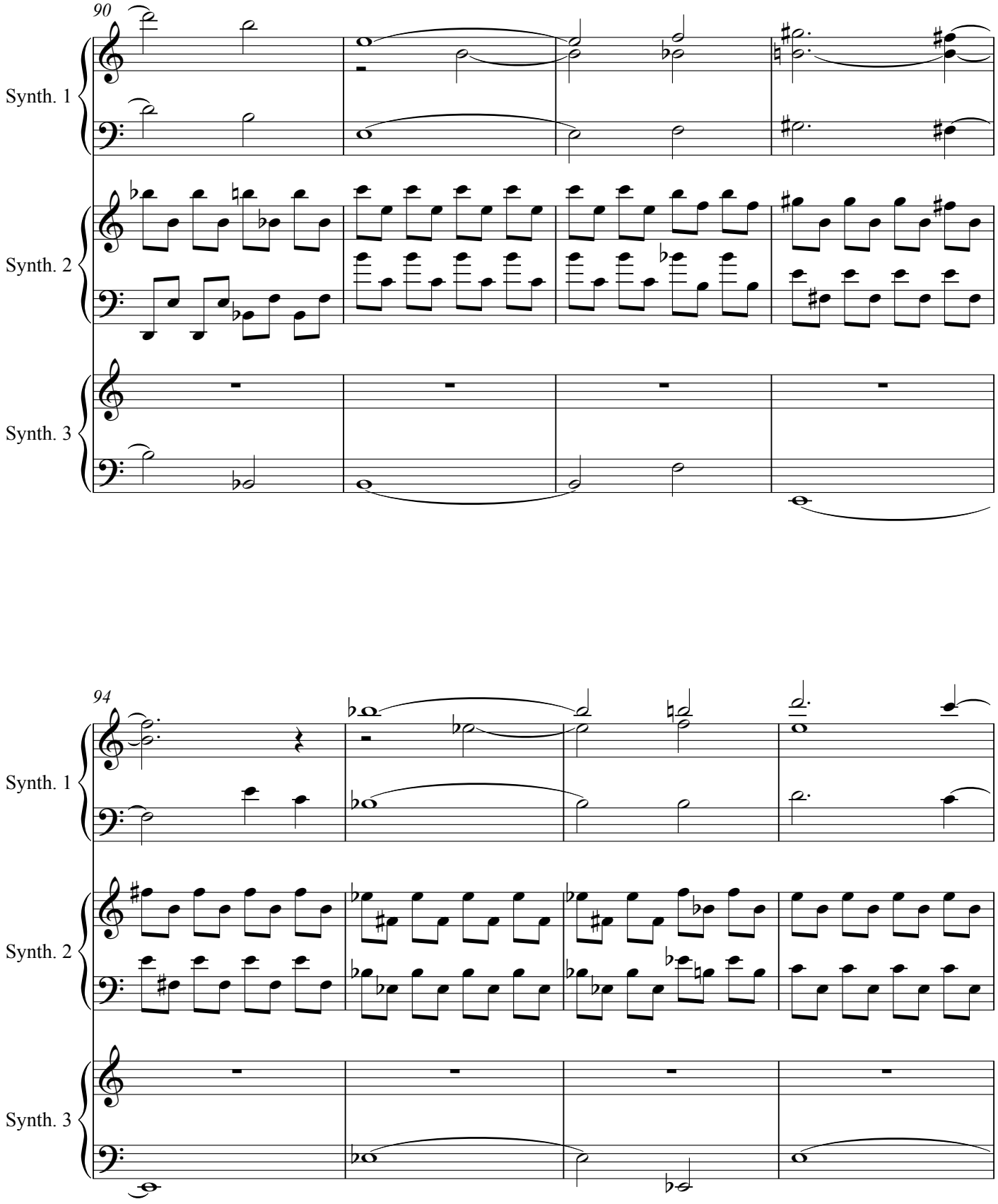

70
Synth. 1
Synth. 2
Synth. 3

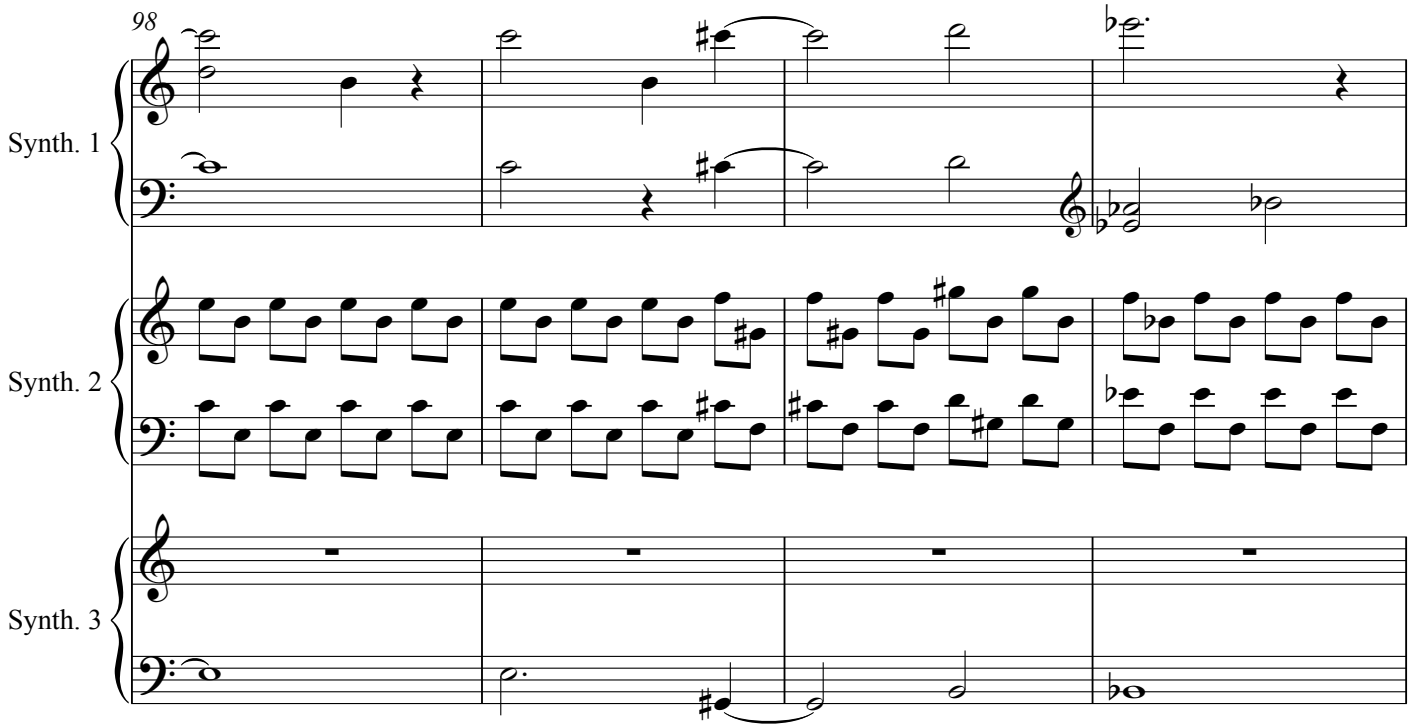

74
Synth. 1
Synth. 2
Synth. 3

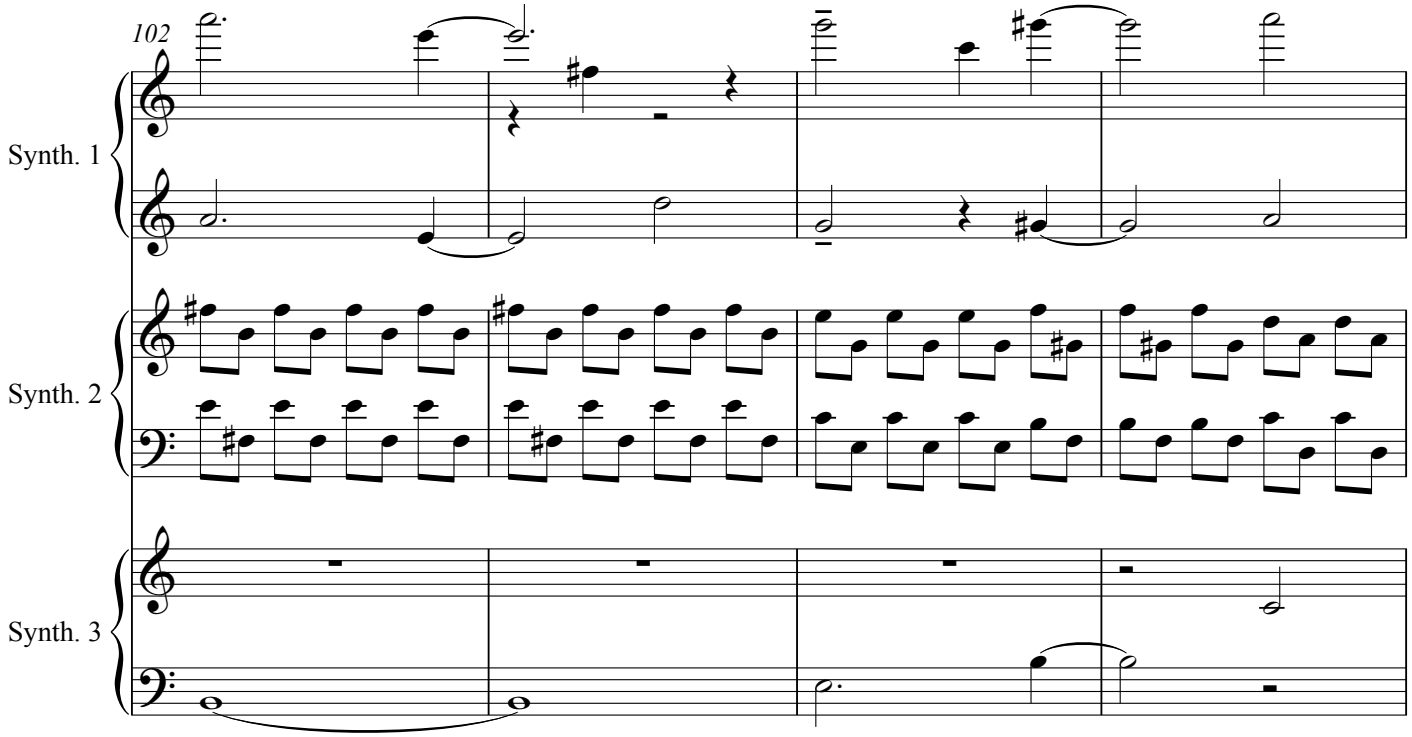

78
Synth. 1
Synth. 2
Synth. 3

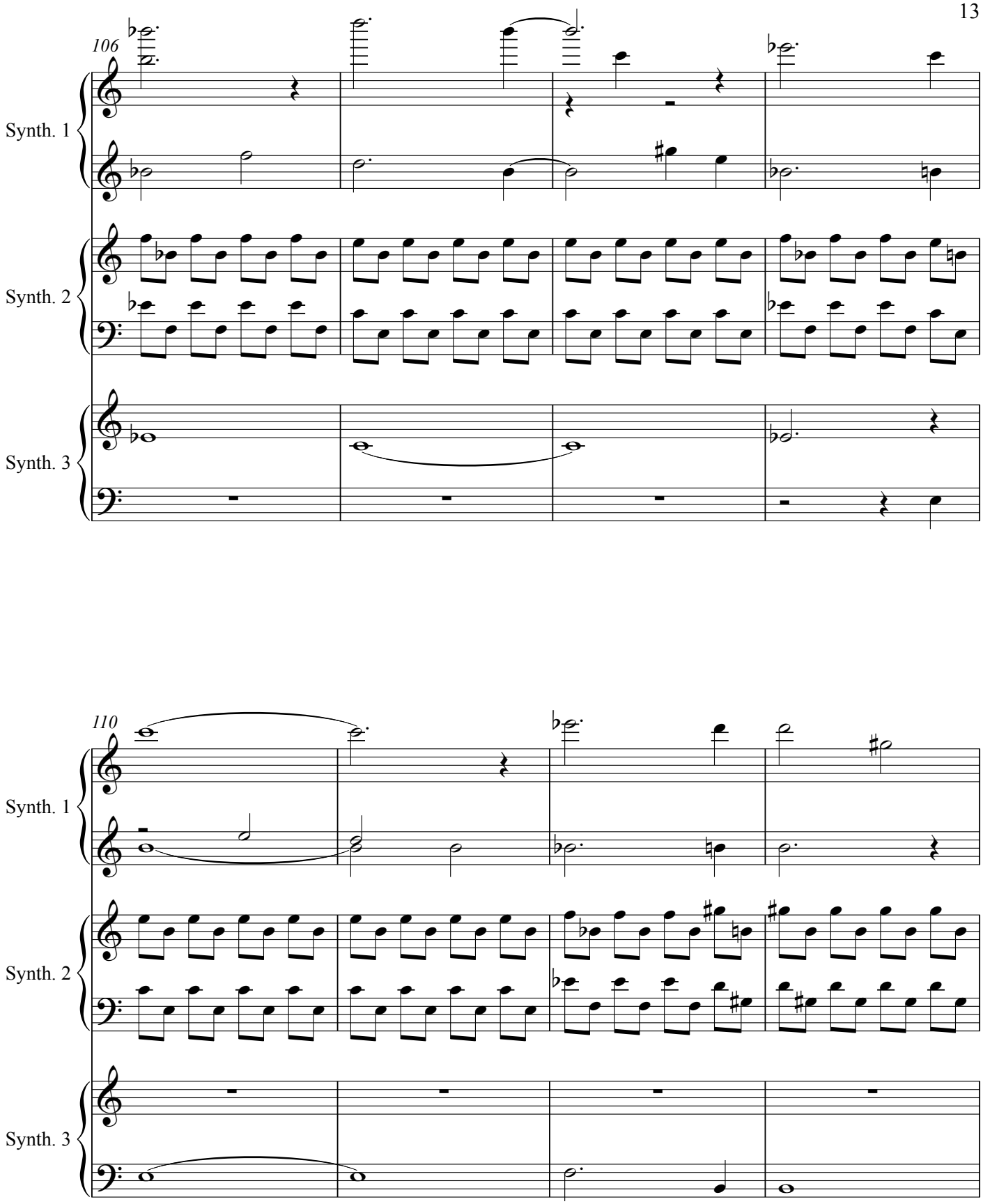

82
Synth. 1
Synth. 2
Synth. 3

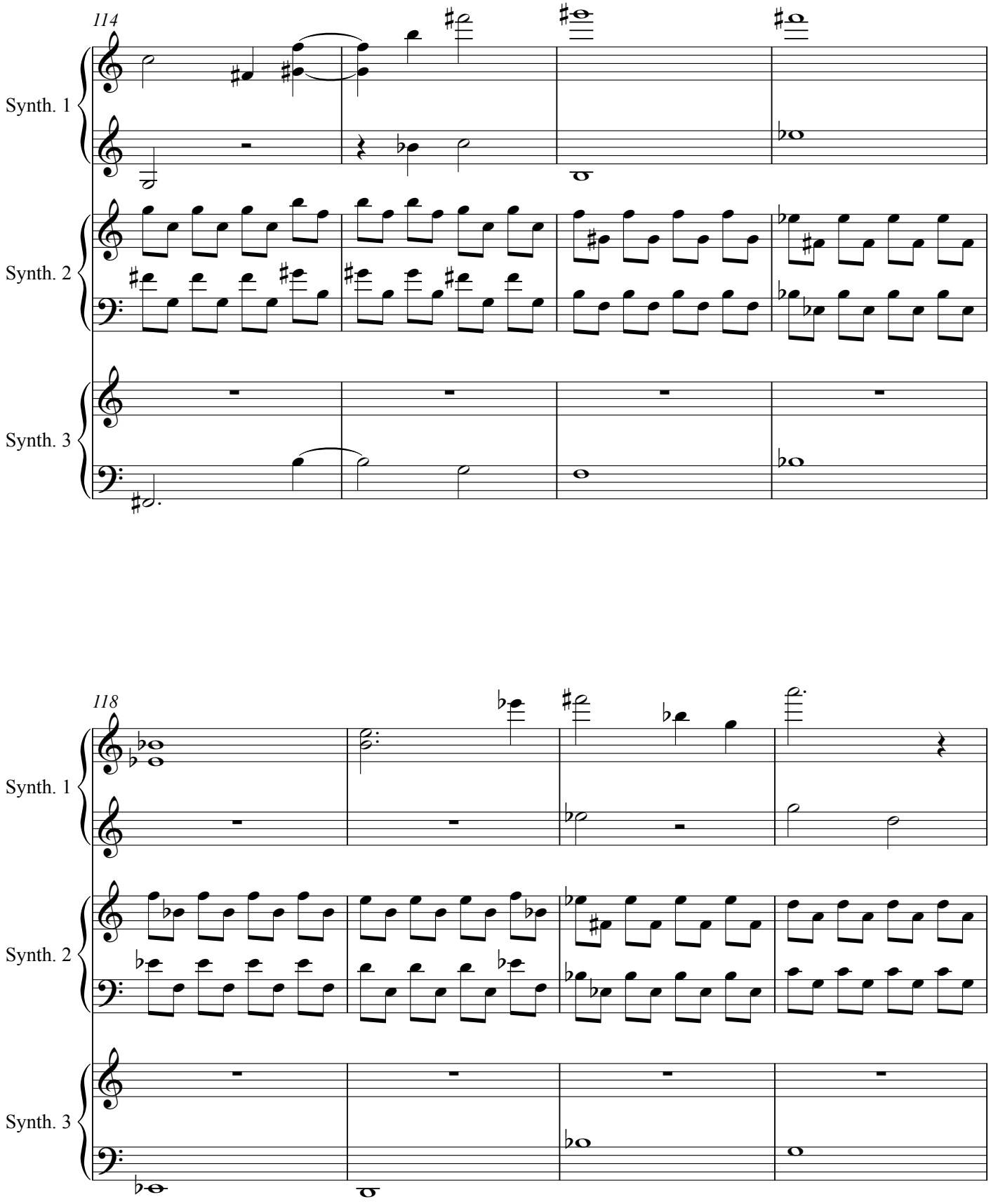

86
Synth. 1
Synth. 2
Synth. 3

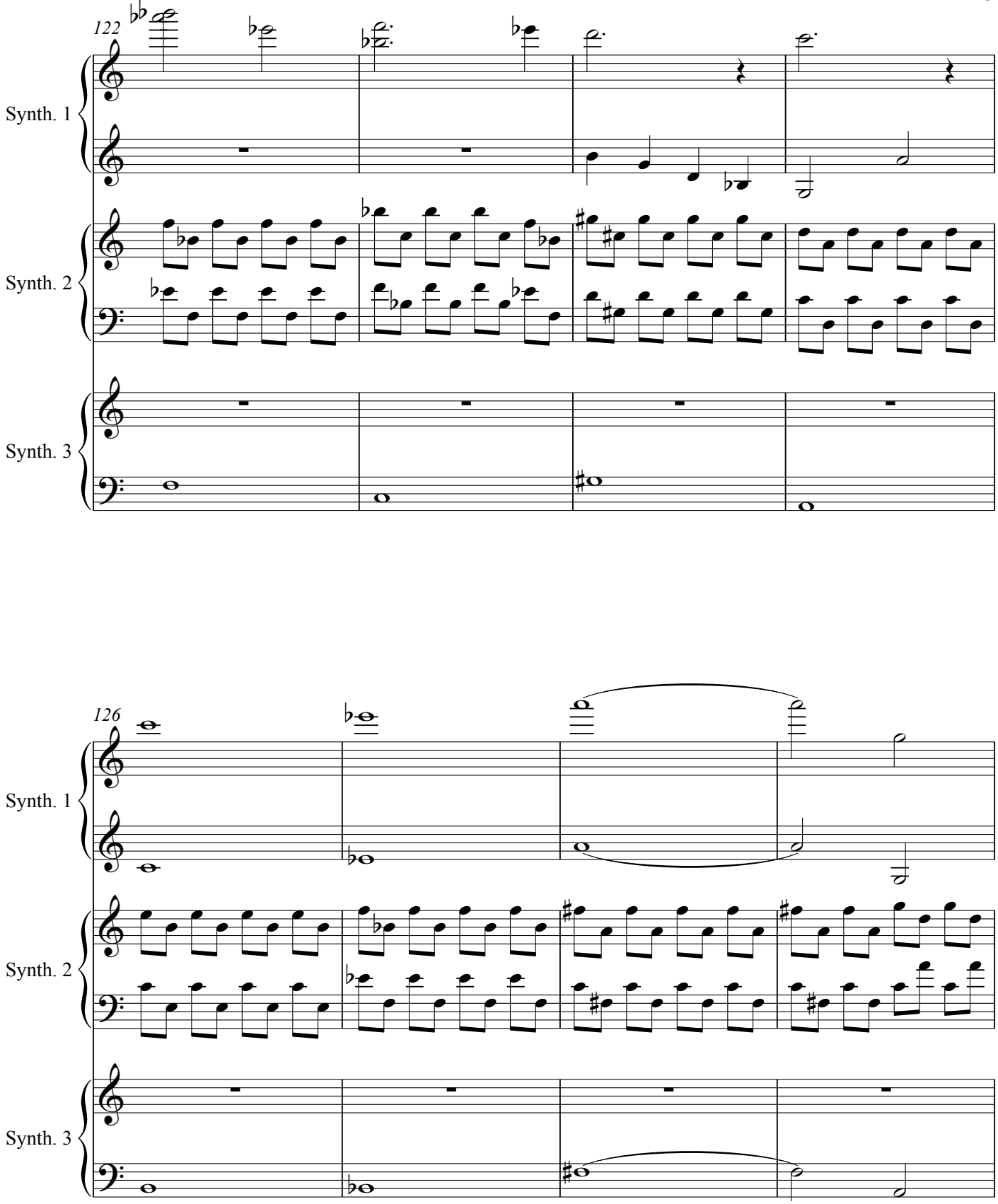

90
Synth. 1
Synth. 2
Synth. 3
94
Synth. 1
Synth. 2
Synth. 3

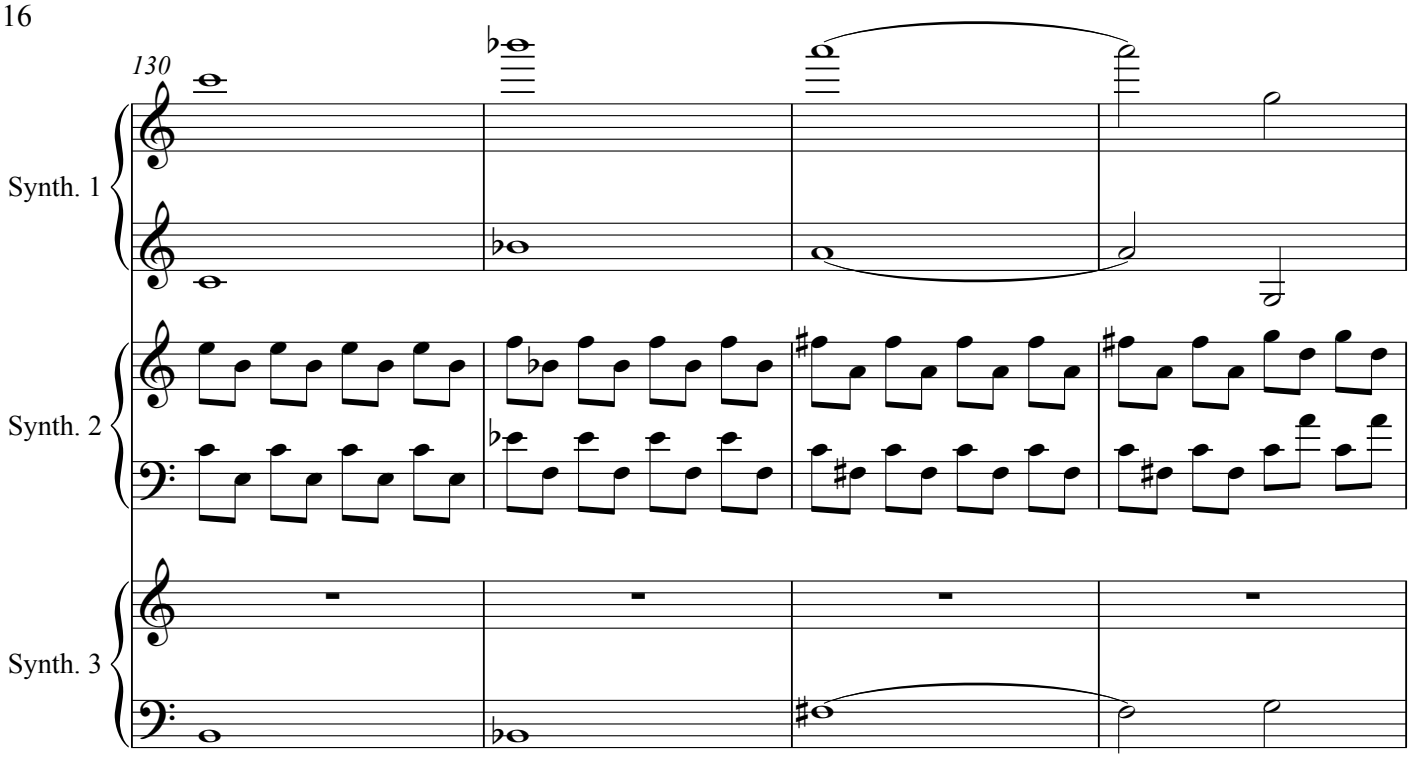

98
Synth. 1
Synth. 2
Synth. 3

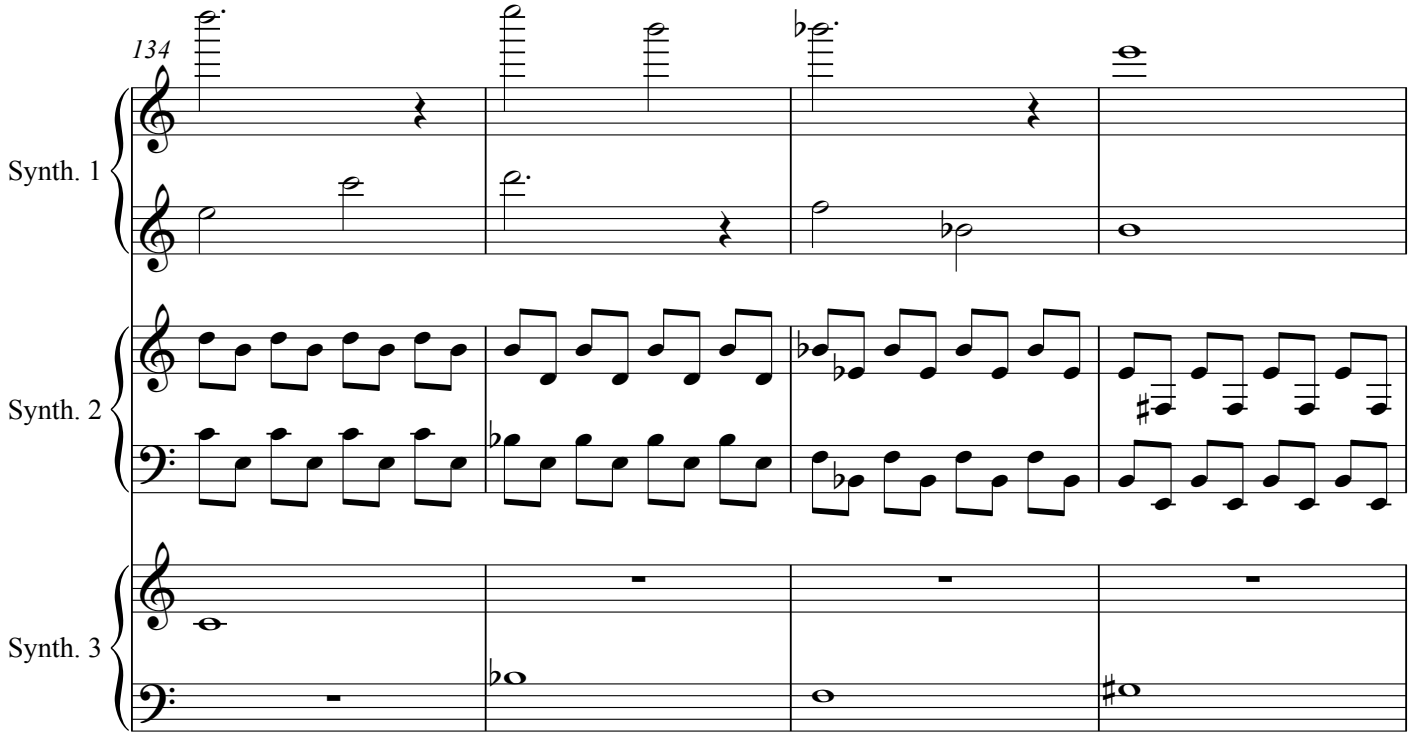

102
Synth. 1
Synth. 2
Synth. 3

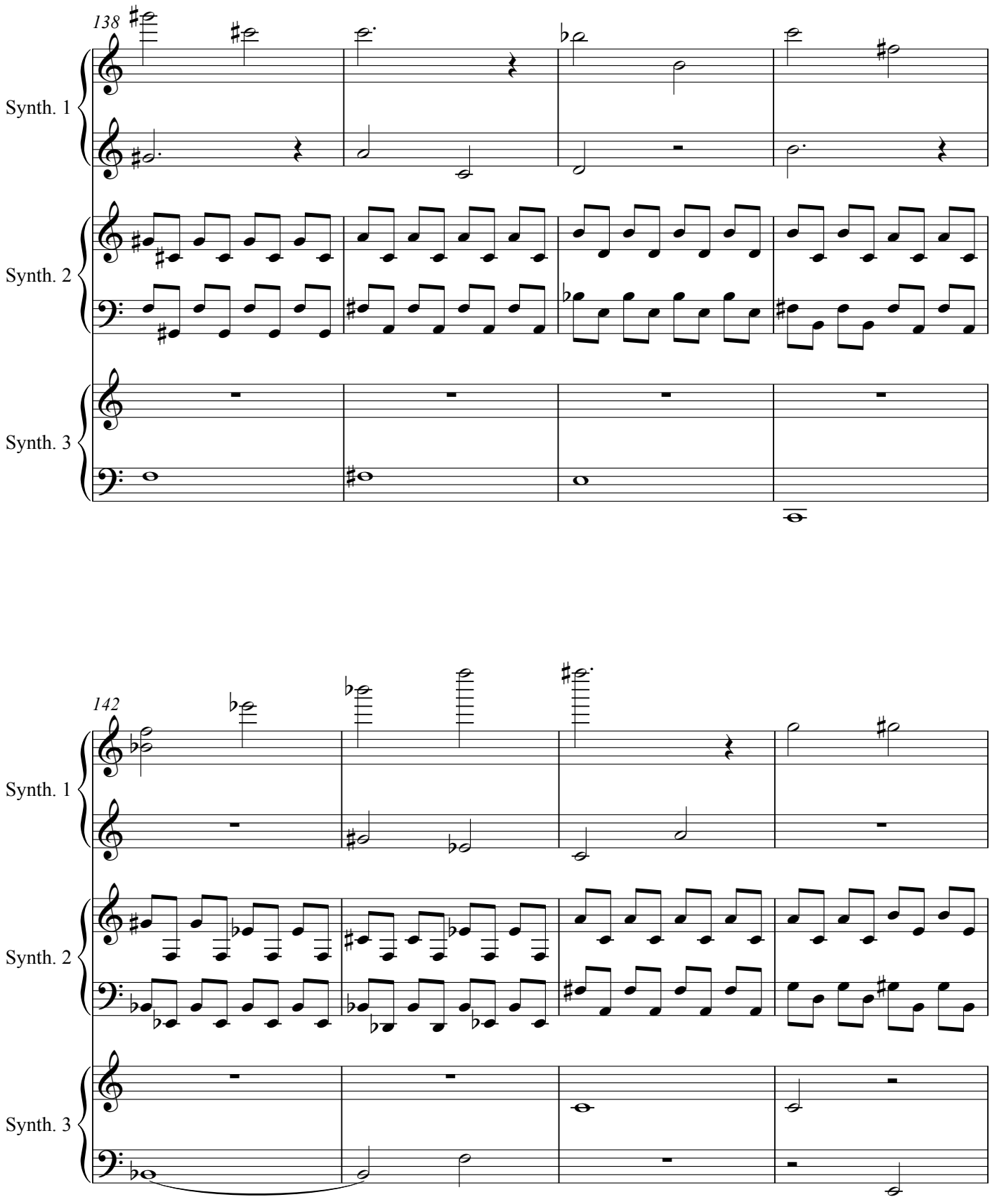

106
Synth. 1
Synth. 2
Synth. 3
110
Synth. 1
Synth. 2
Synth. 3

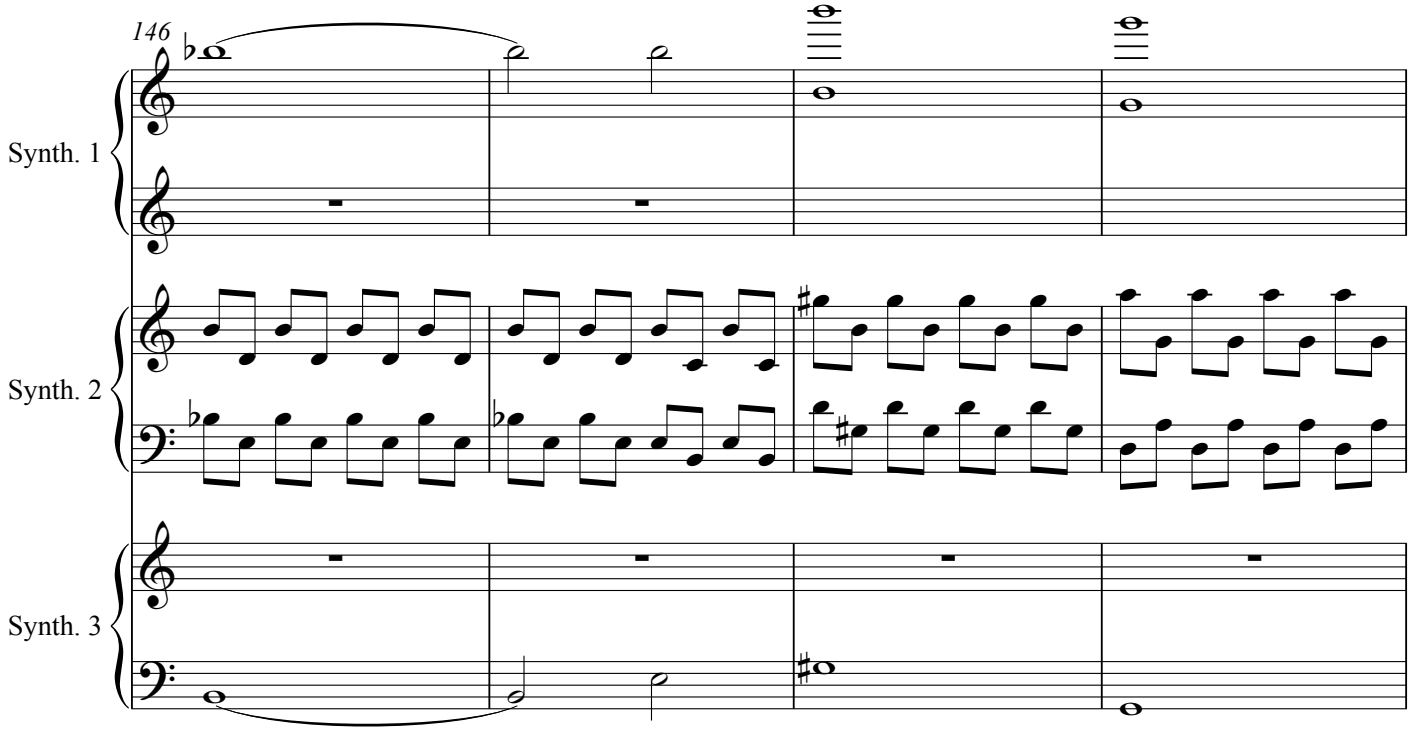

114
Synth. 1
Synth. 2
Synth. 3
118
Synth. 1
Synth. 2
Synth. 3

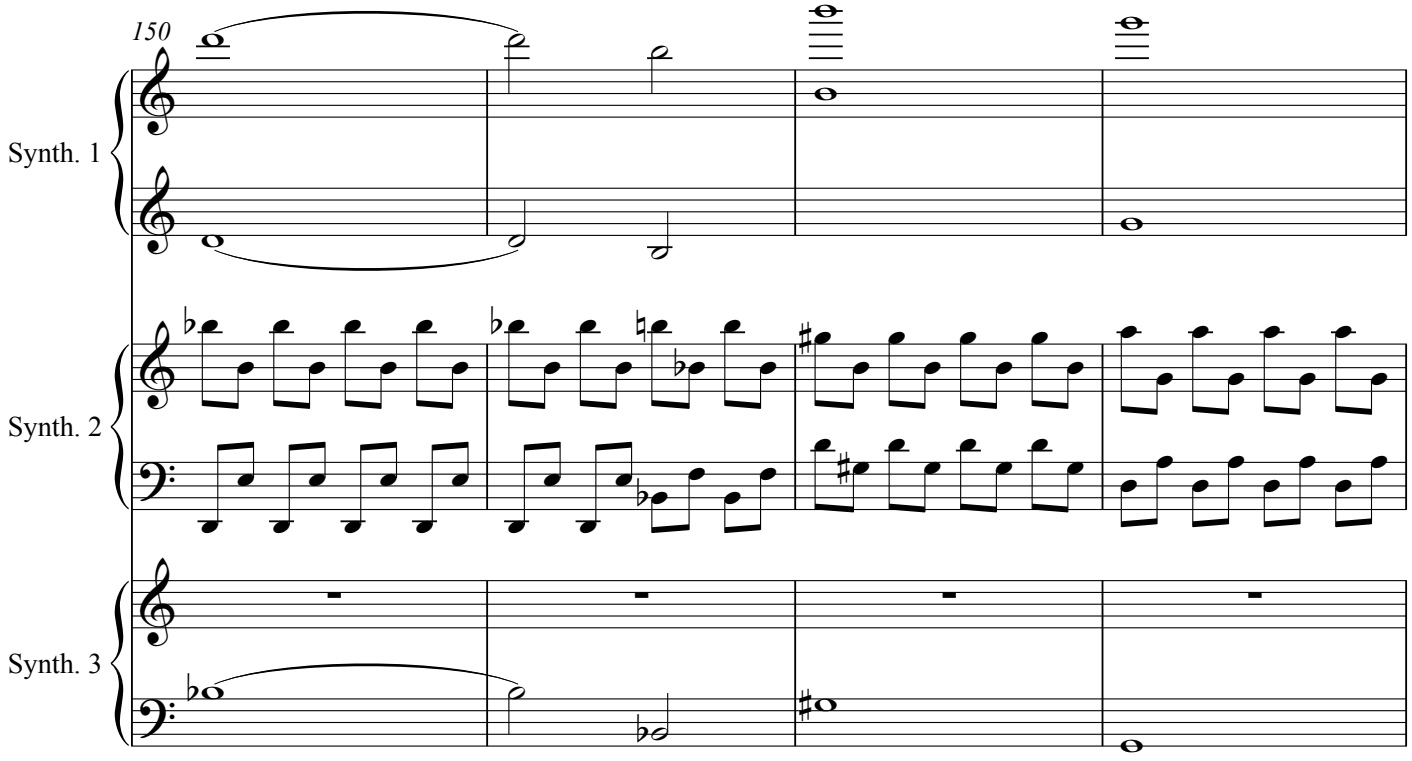

122
Synth. 1
Synth. 2
Synth. 3
126
Synth. 1
Synth. 2
Synth. 3

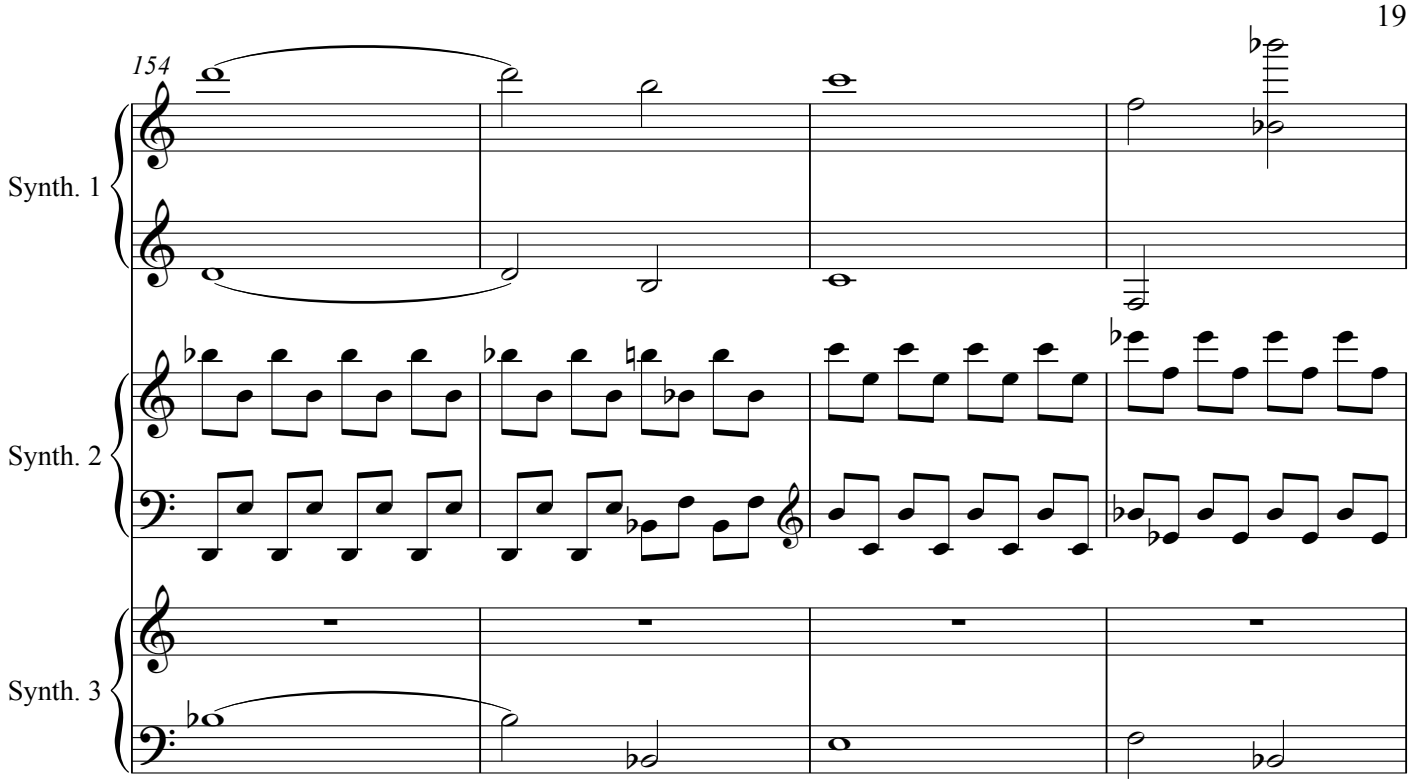

130
Synth. 1
Synth. 2
Synth. 3

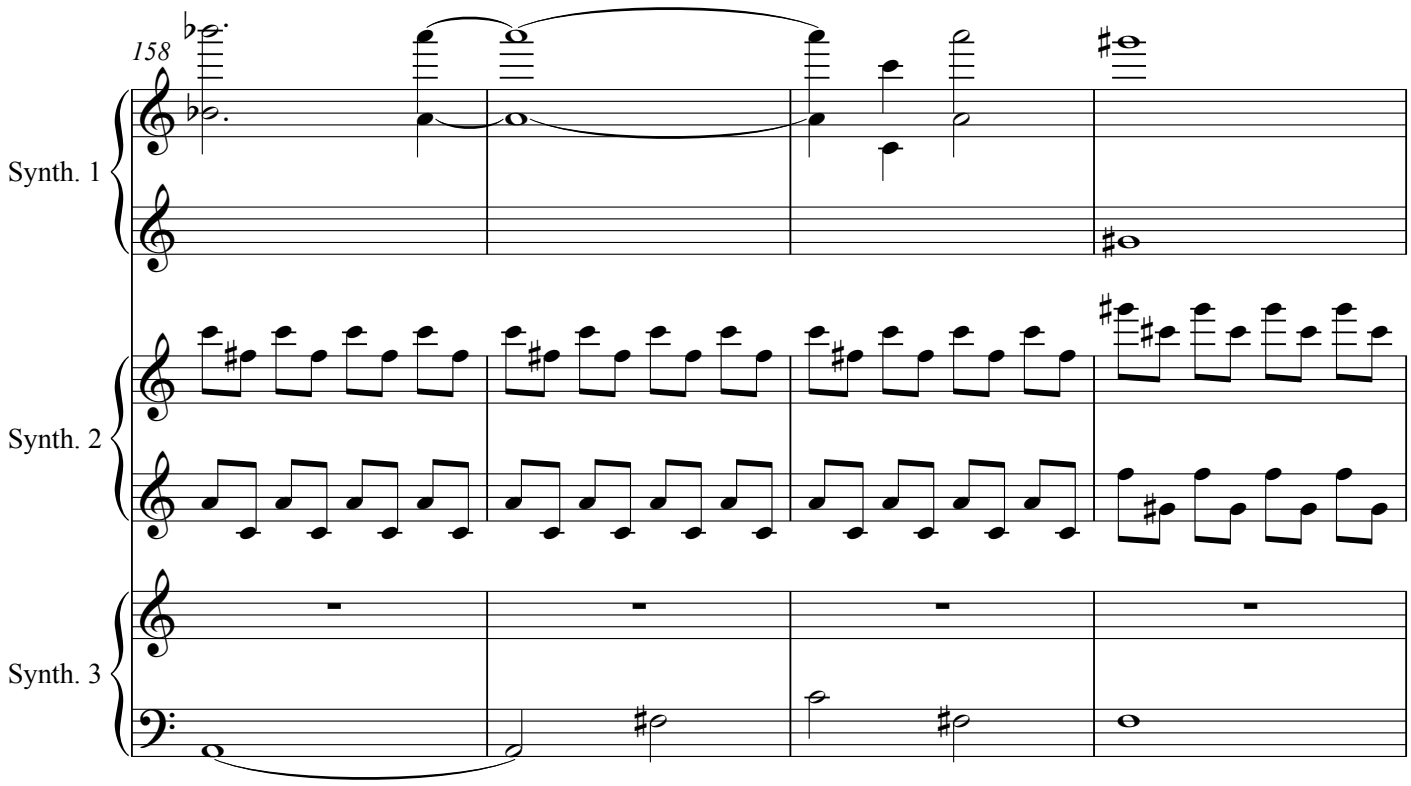

134
Synth. 1
Synth. 2
Synth. 3

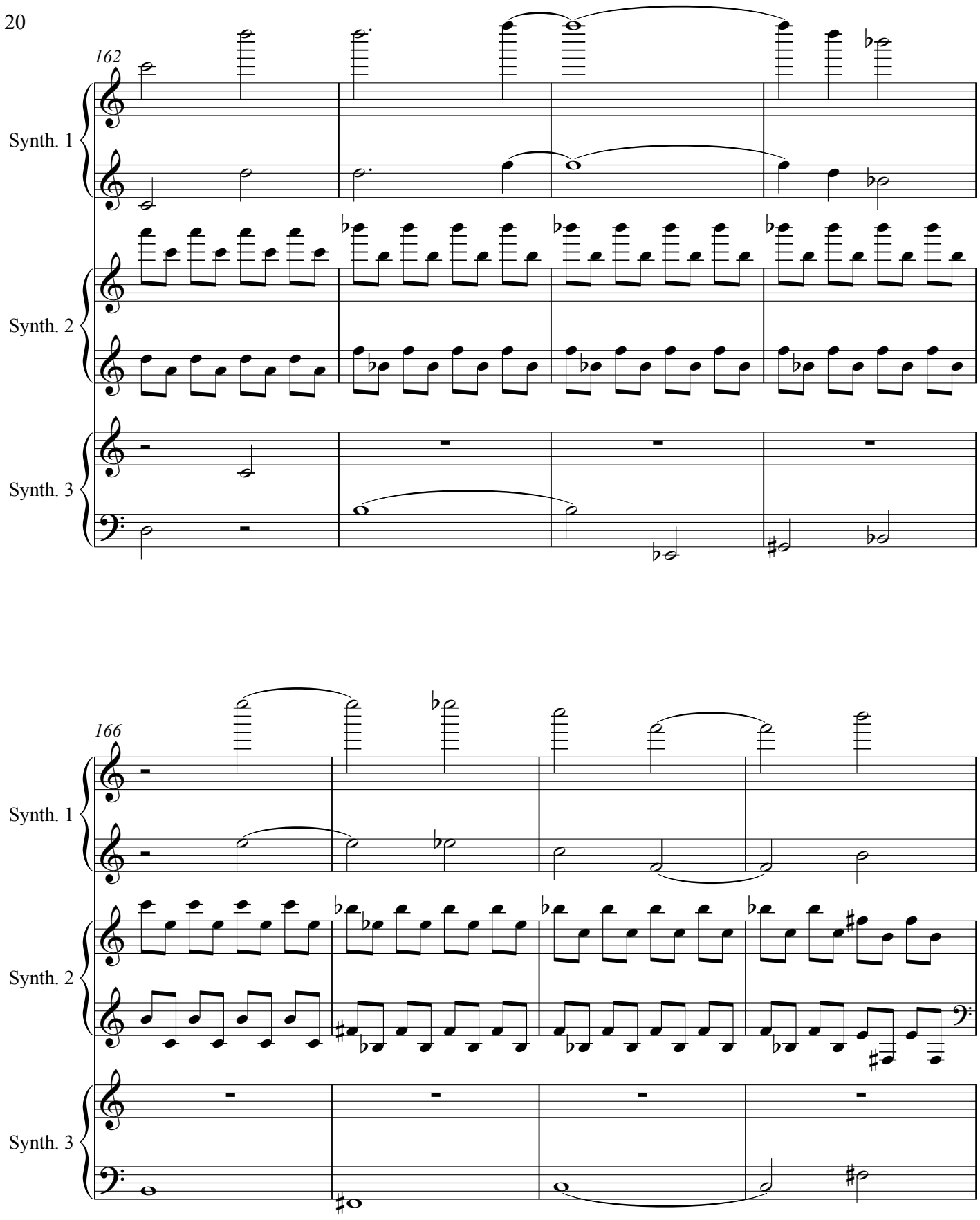

138
Synth. 1
Synth. 2
Synth. 3
142
Synth. 1
Synth. 2
Synth. 3

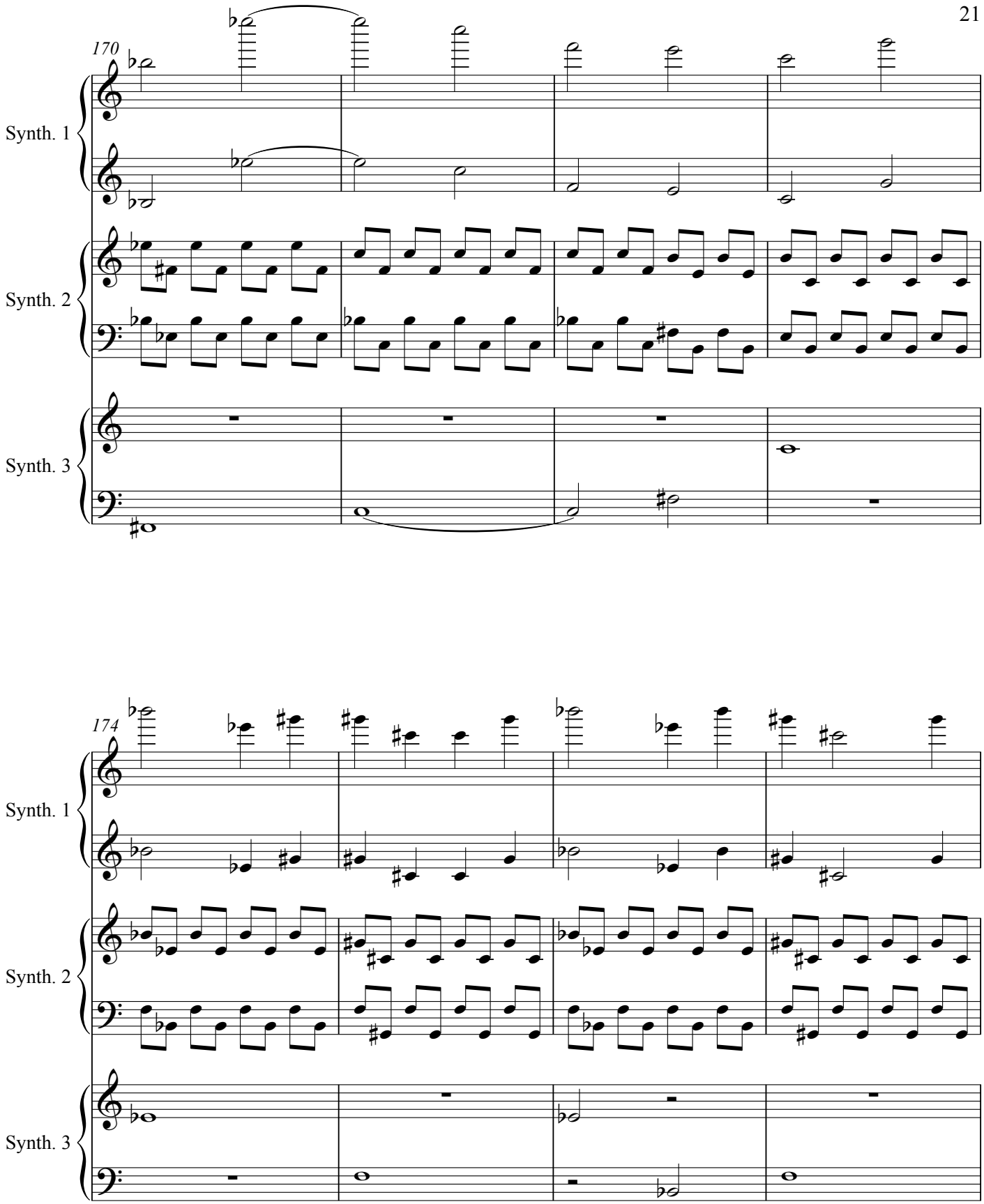

146
Synth. 1
Synth. 2
Synth. 3

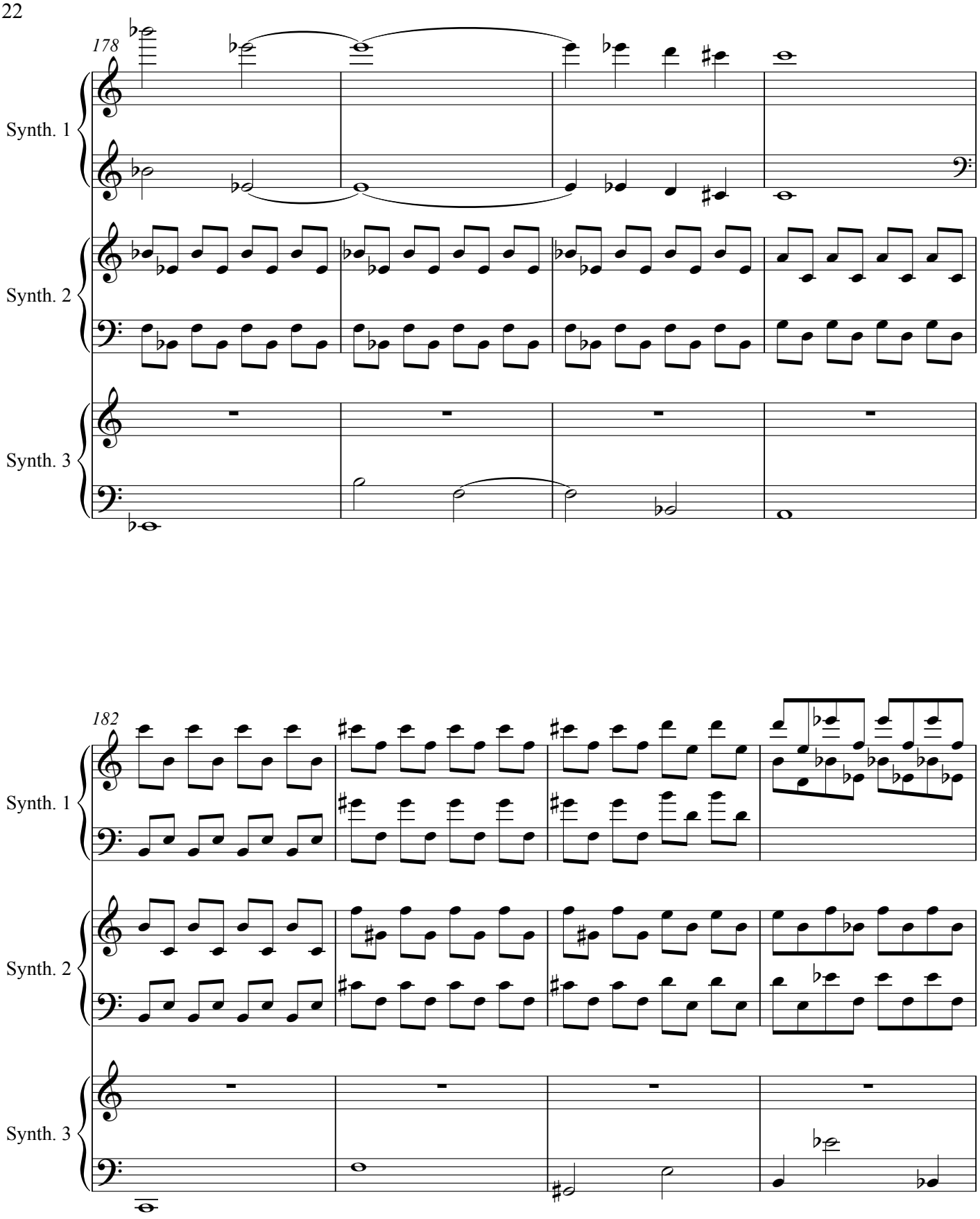

150
Synth. 1
Synth. 2
Synth. 3

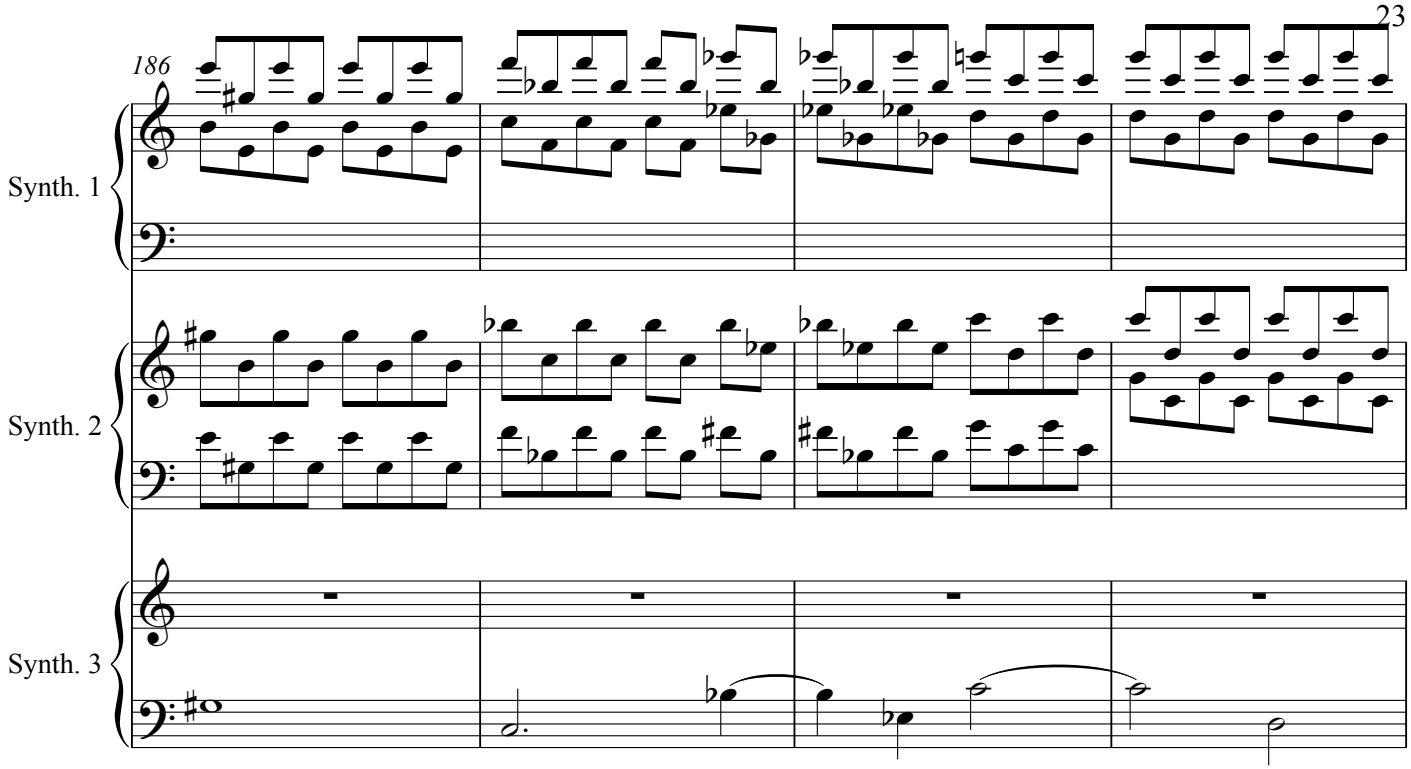

154
Synth. 1
Synth. 2
Synth. 3

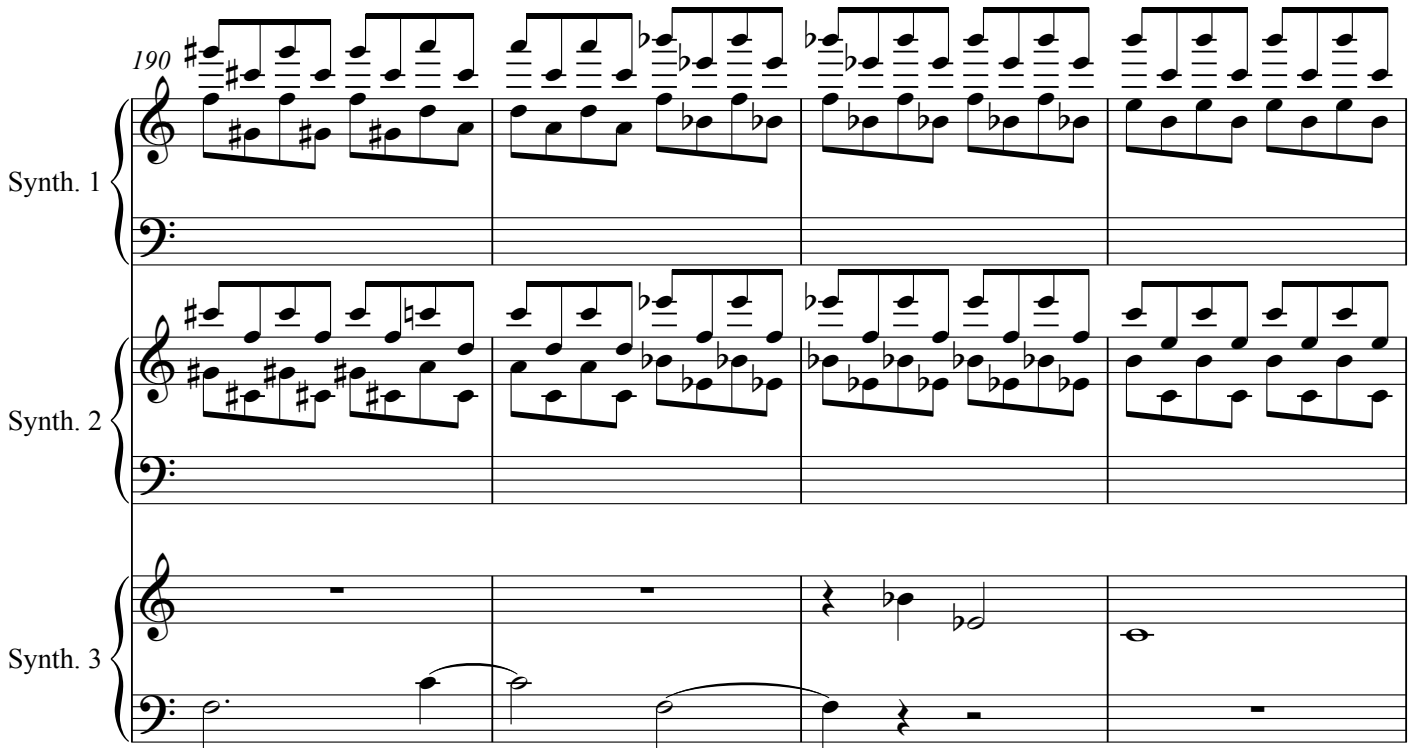

158
Synth. 1
Synth. 2
Synth. 3

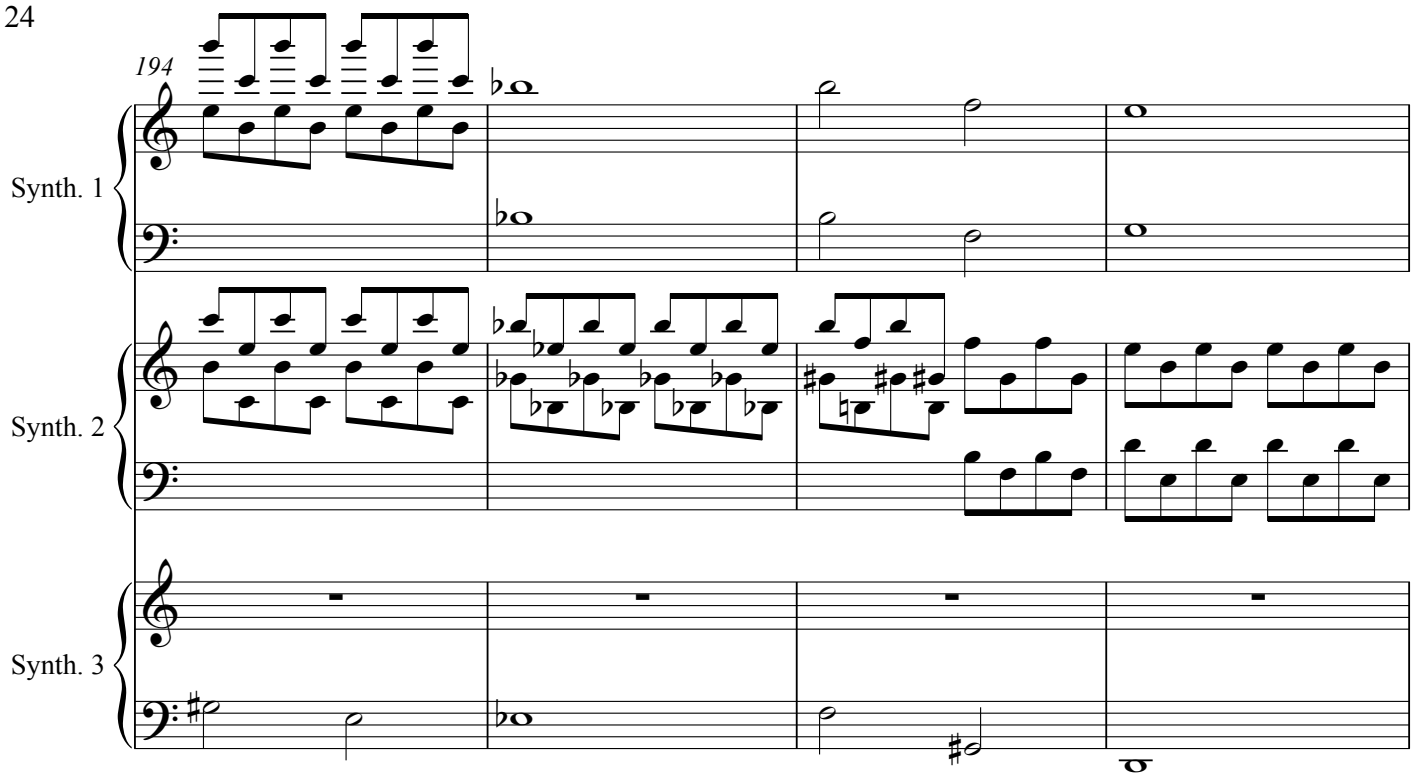

162
Synth. 1
Synth. 2
Synth. 3
166
Synth. 1
Synth. 2
Synth. 3

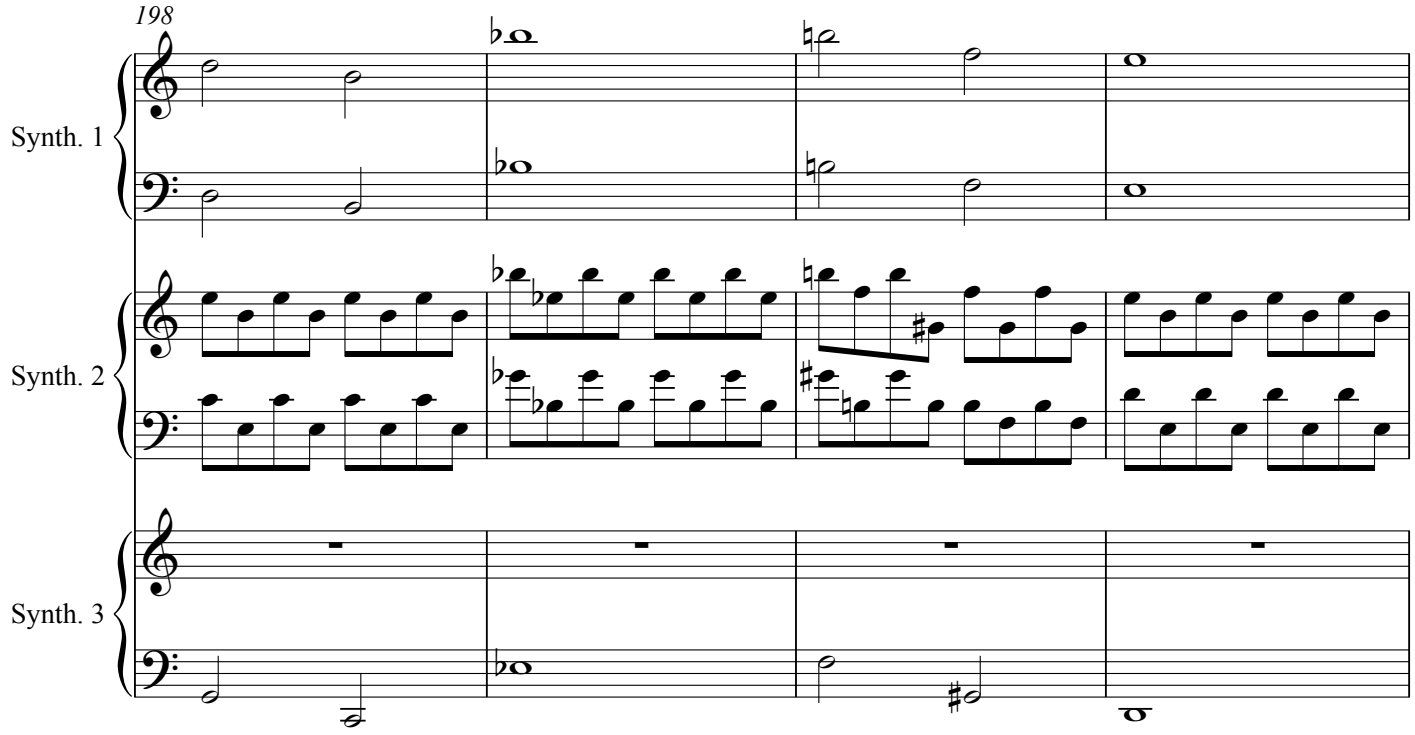

170
Synth. 1
Synth. 2
Synth. 3
174
Synth. 1
Synth. 2
Synth. 3

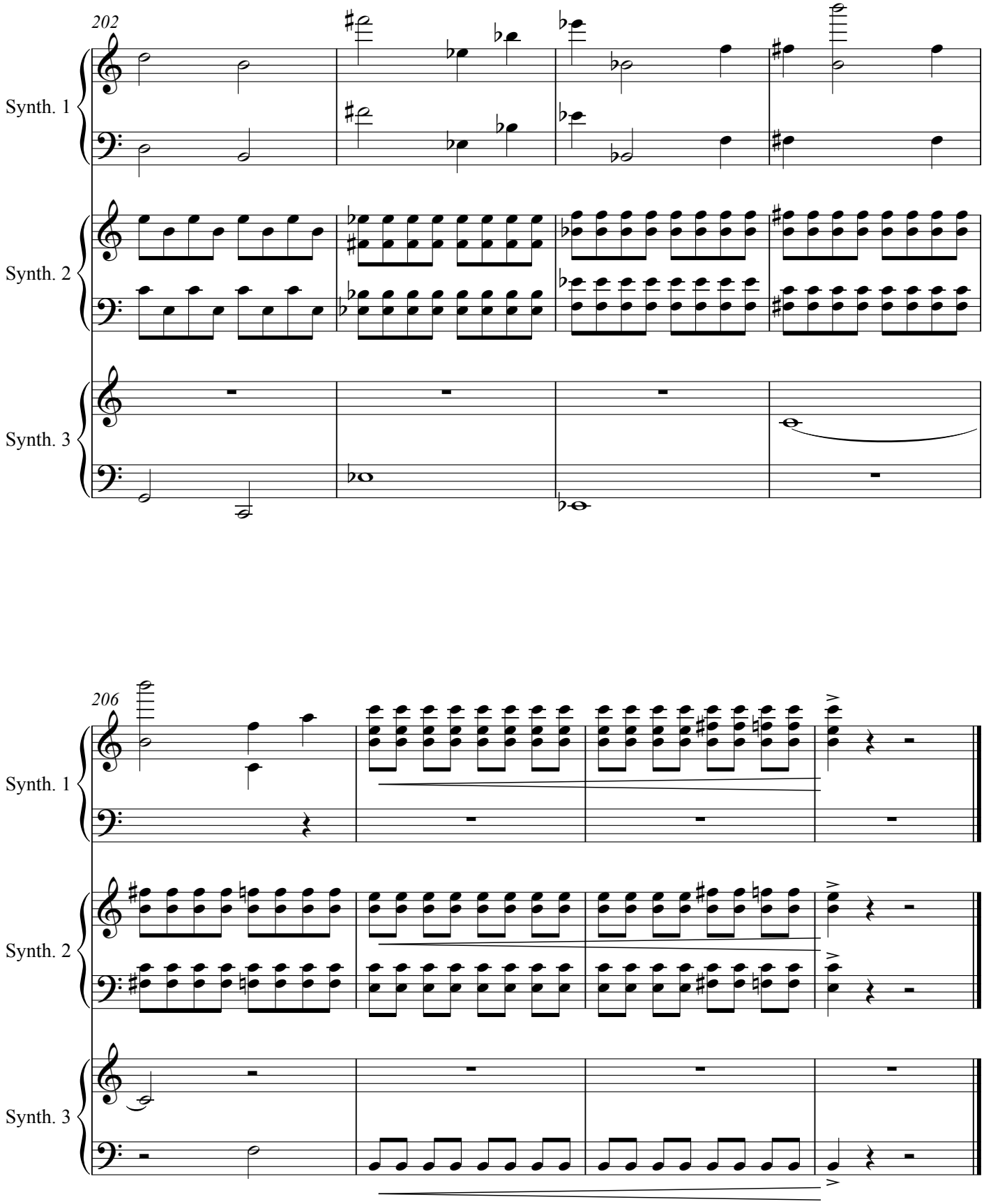

178
Synth. 1
Synth. 2
Synth. 3
182
Synth. 1
Synth. 2
Synth. 3


186
Synth. 1
Synth. 2
Synth. 3


190
Synth. 1
Synth. 2
Synth. 3


194
Synth. 1
Synth. 2
Synth. 3


198
Synth. 1
Synth. 2
Synth. 3


202
Synth. 1
Synth. 2
Synth. 3
206
Synth. 1
Synth. 2
Synth. 3