Appendix A

The best results

A.1 The Bin-Packing Problem

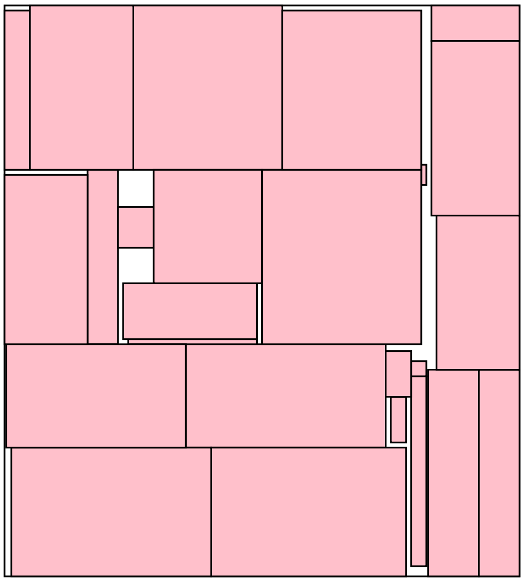

Figure A.1: Pattern for r25_1, packing height = 111

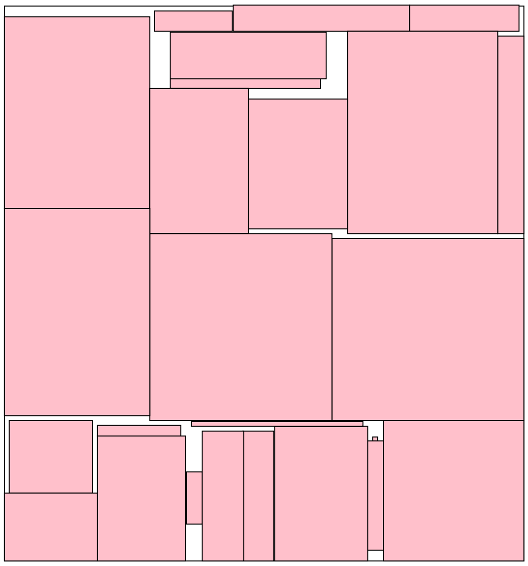

Figure A.2: Pattern for r25_2, packing height = 107

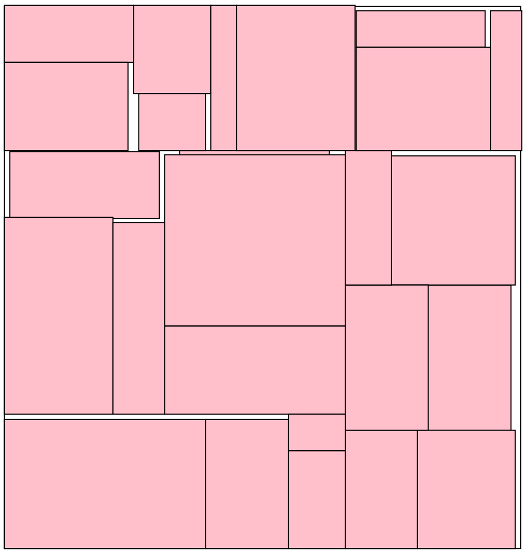

Figure A.3: Pattern for r25_3, packing height = 105

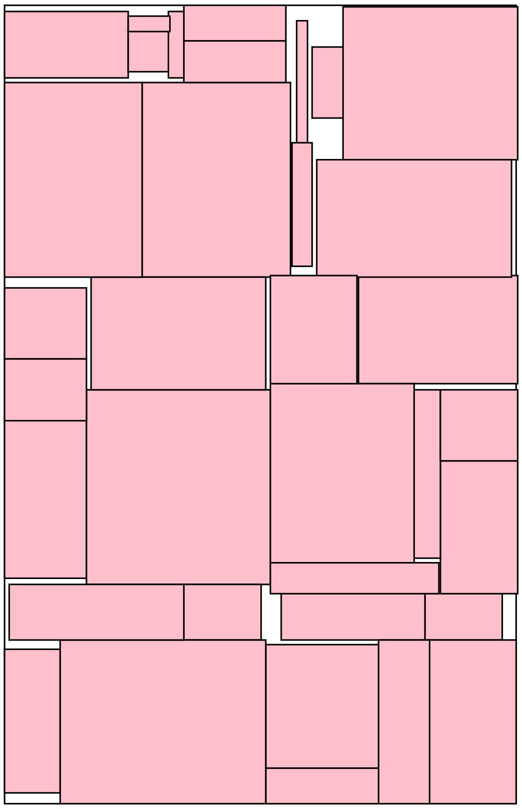

Figure A.4: Pattern for r35_1, packing height = 156

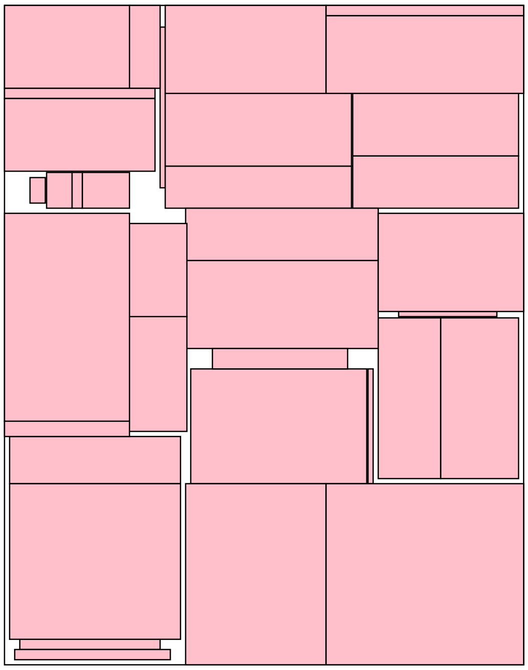

Figure A.5: Pattern for r35_2, packing height = 127

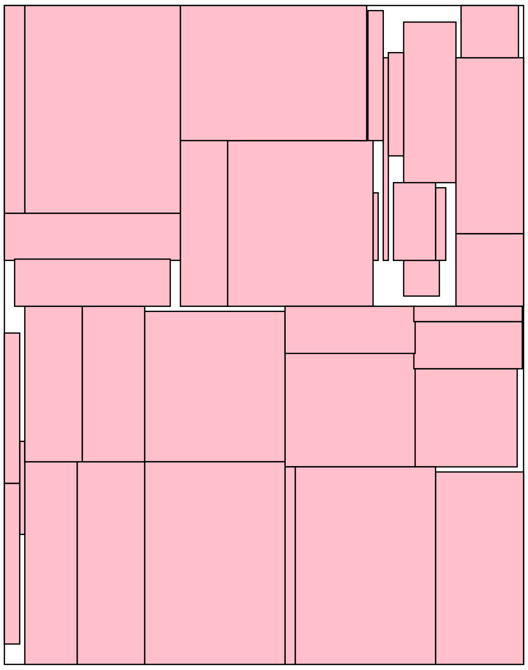

Figure A.6: Pattern for r35_3, packing height = 127

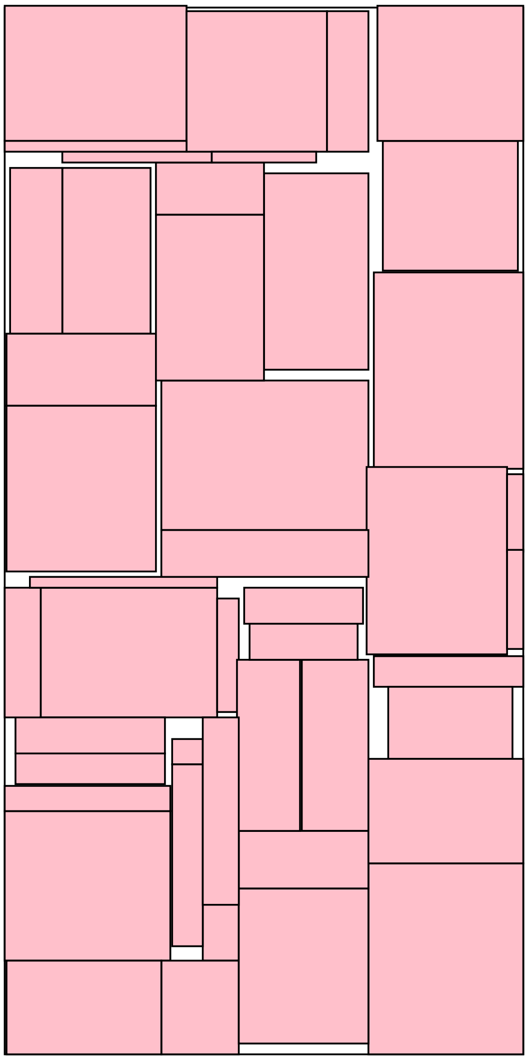

Figure A.7: Pattern for r45_1, packing height = 202

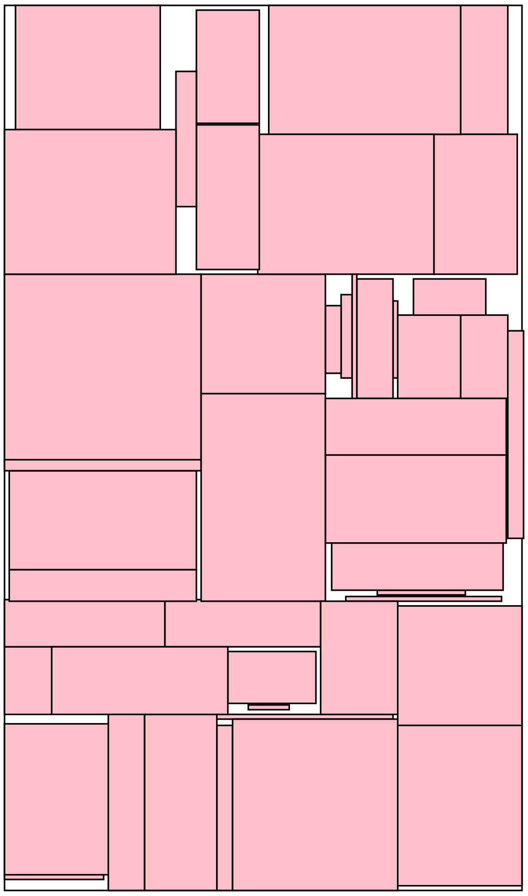

Figure A.8: Pattern for r45_2, packing height = 171

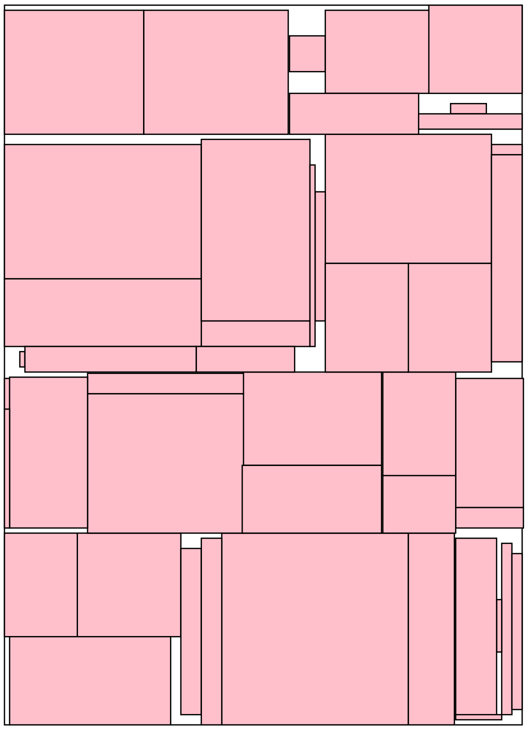

Figure A.9: Pattern for r45_3, packing height = 139

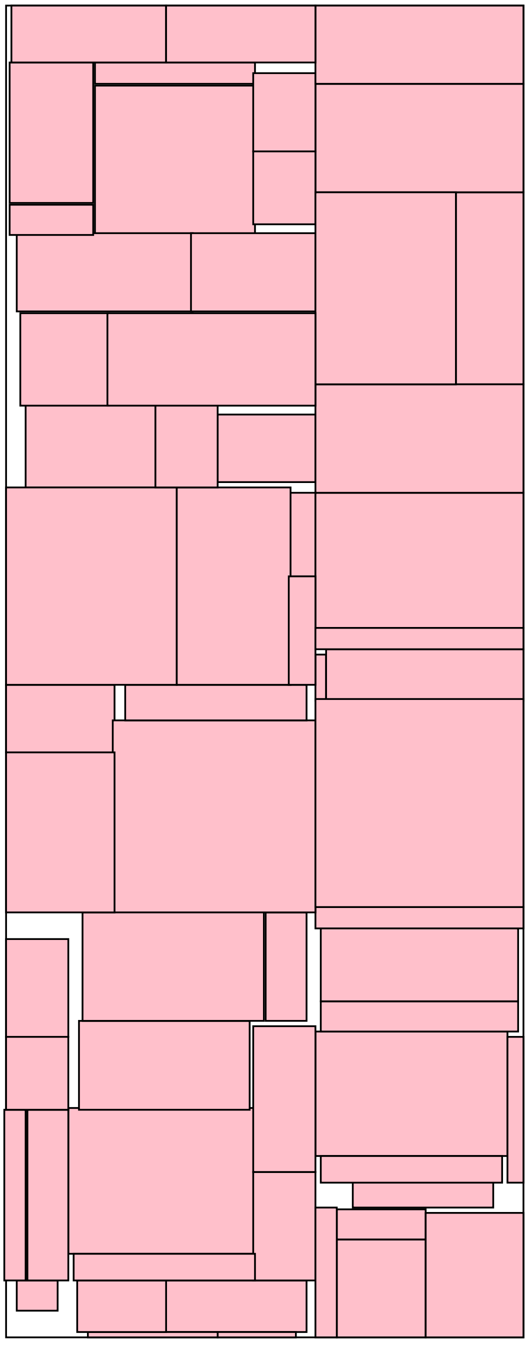

Figure A.10: Pattern for r60_1, packing height = 257

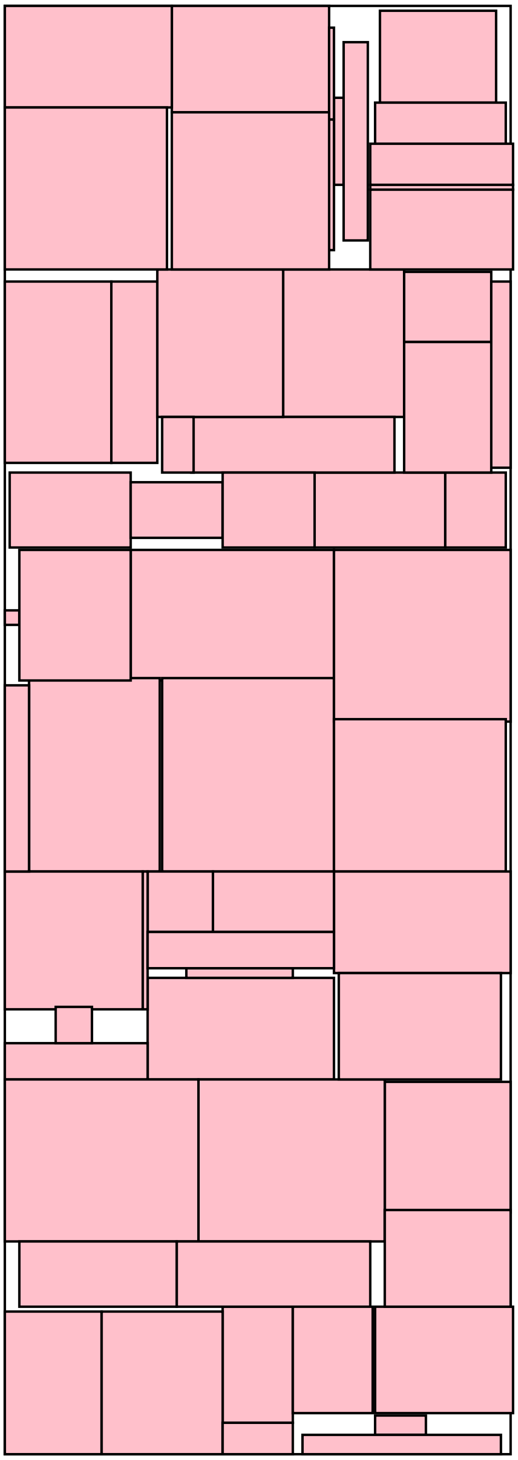

Figure A.11: Pattern for r60_2, packing height = 286

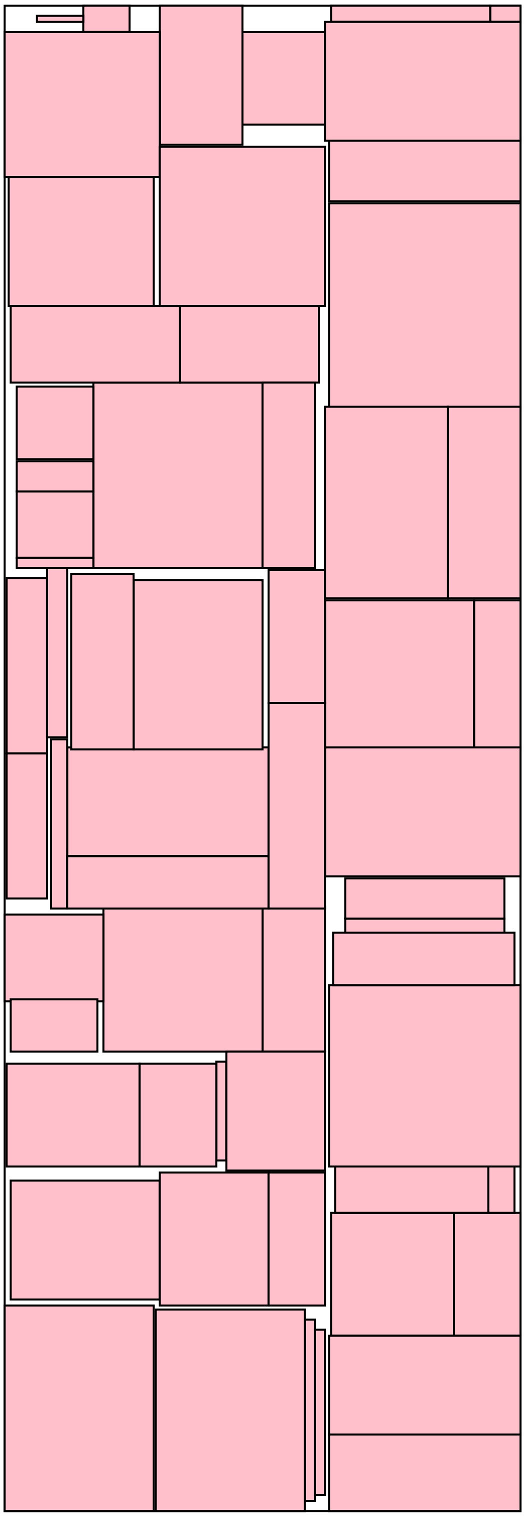

Figure A.12: Pattern for r60_3, packing height = 292

A.2 VLSI Layout Generation

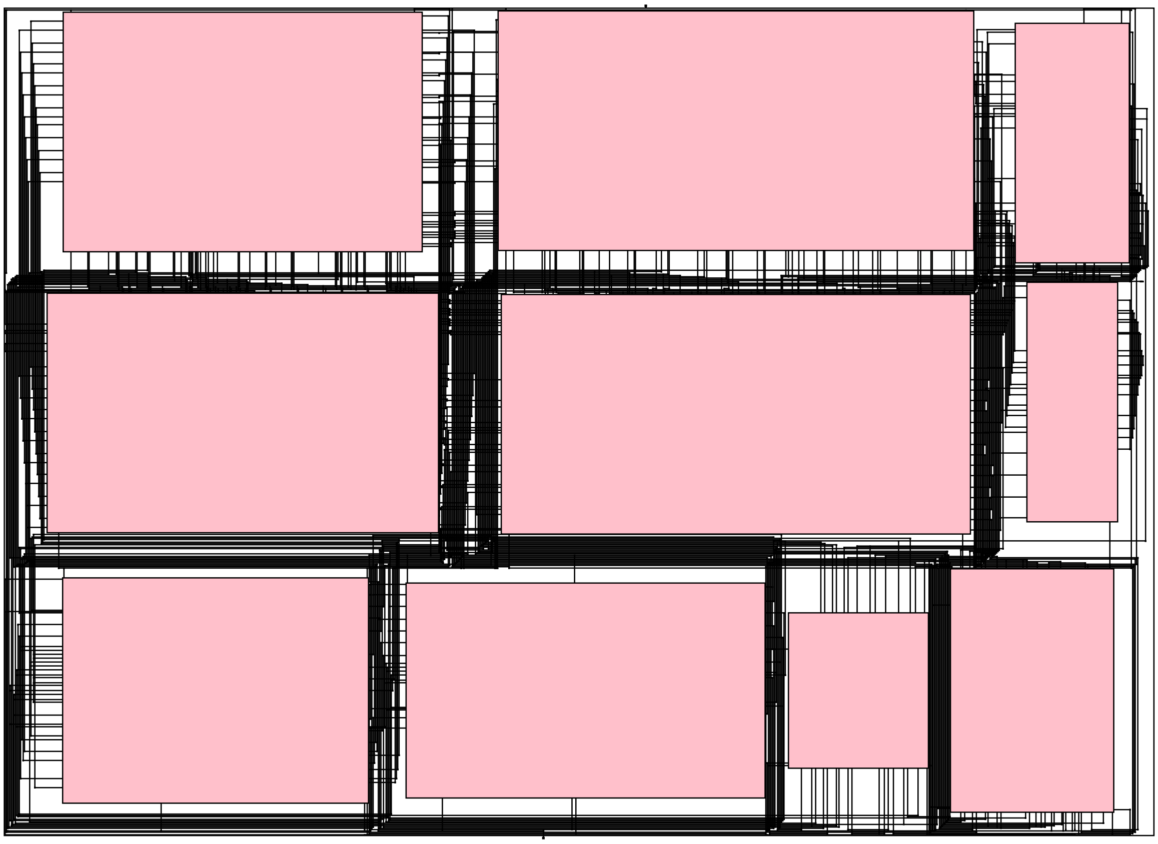

Figure A.13: Layout for circuit *xerox*, area = $27.77mm^2$

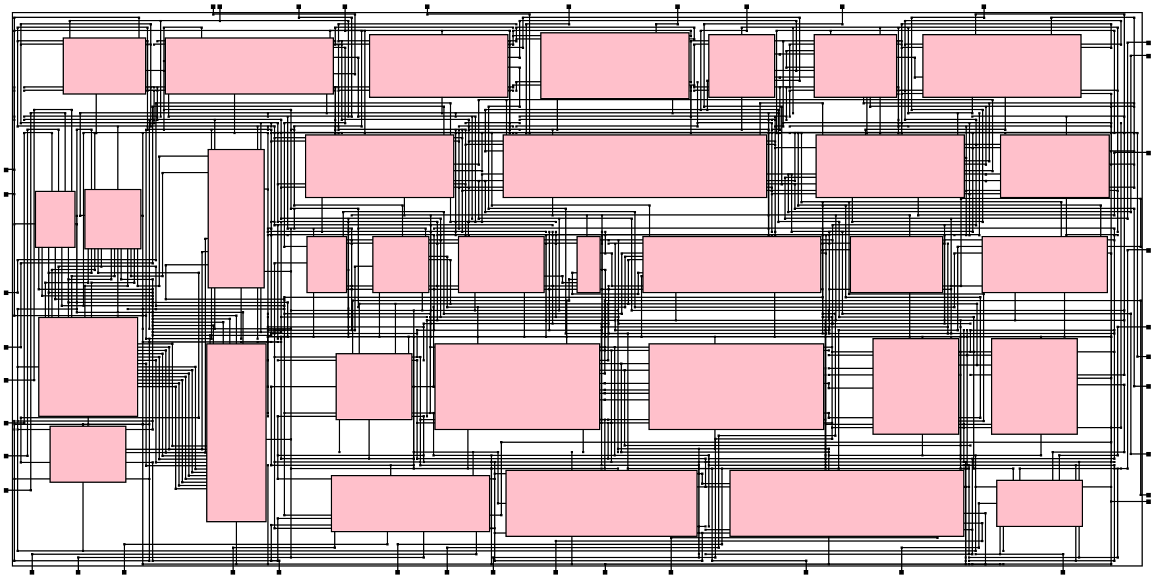

Figure A.14: Layout for circuit $ami33$, area = $2.82mm^2$

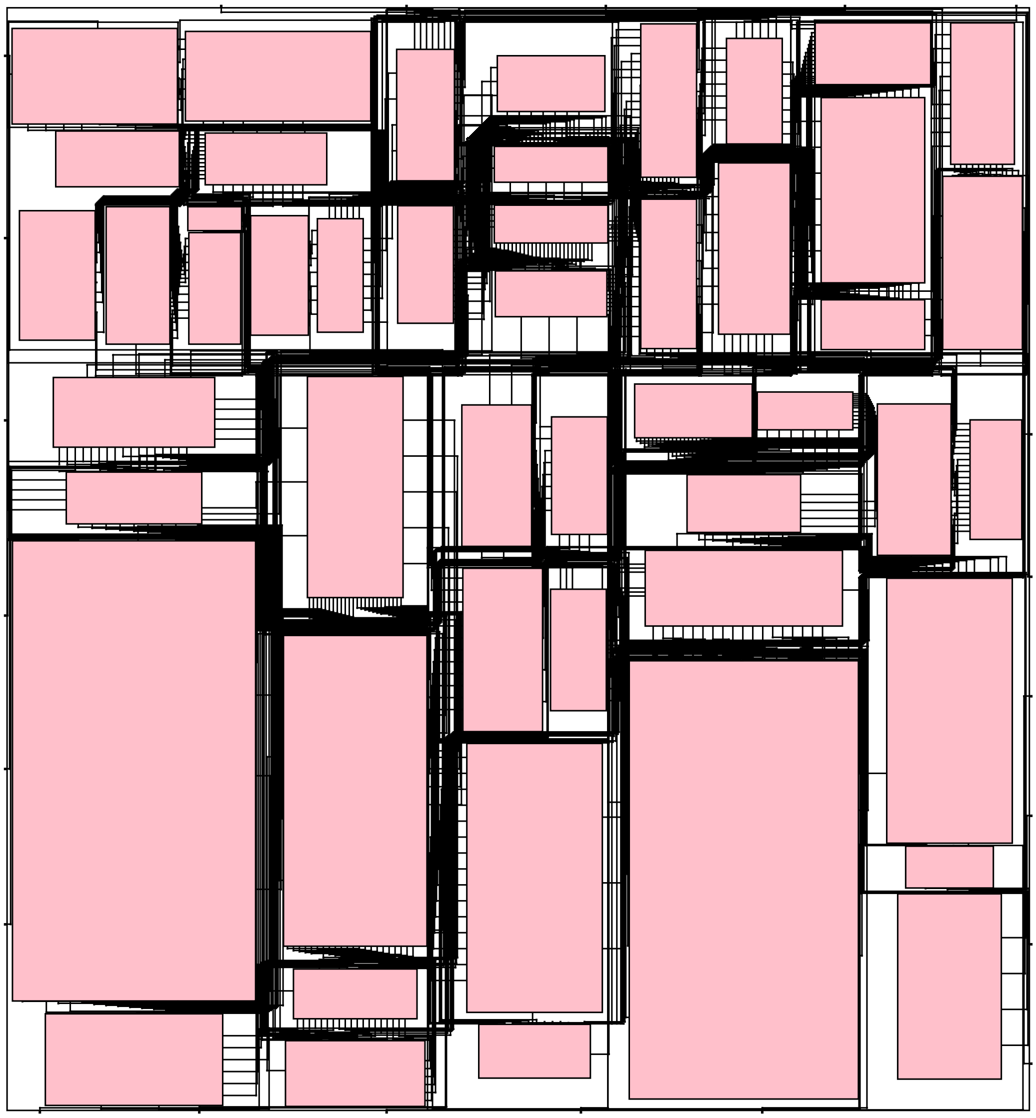

Figure A.15: Layout for circuit $ami49$, area = $55.65mm^2$

A.3 The Facility Layout Problem

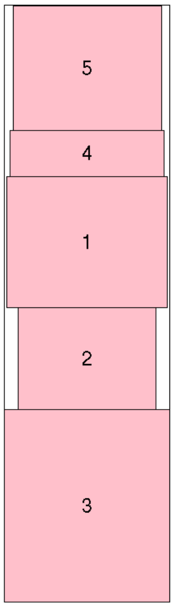

Figure A.16: Layout for TL91-5, flow costs = 208.4

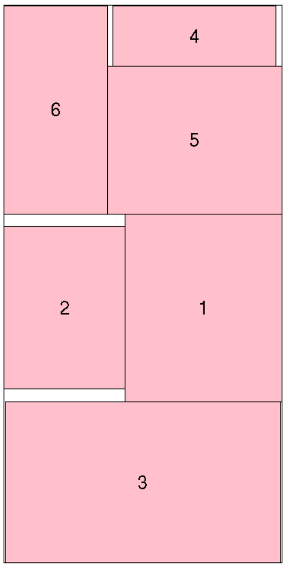

Figure A.17: Layout for TL91-6, flow costs = 316.5

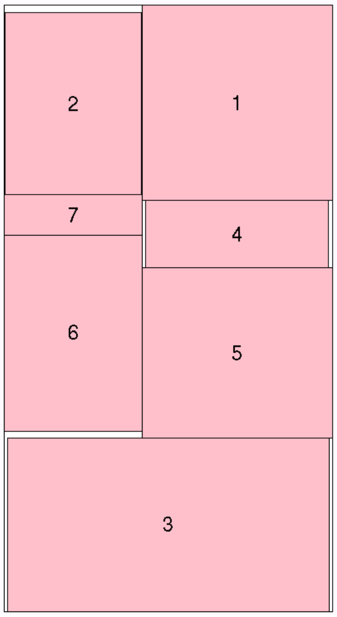

Figure A.18: Layout for TL91-7, flow costs = 517.9

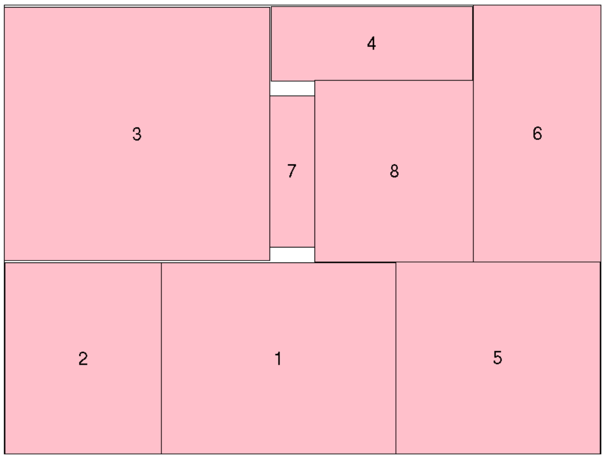

Figure A.19: Layout for TL91-8, flow costs = 711.7

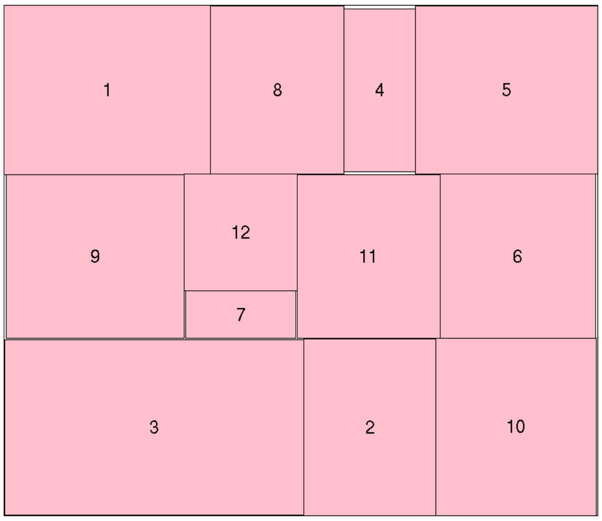

Figure A.20: Layout for TL91-12, flow costs = 1953.5

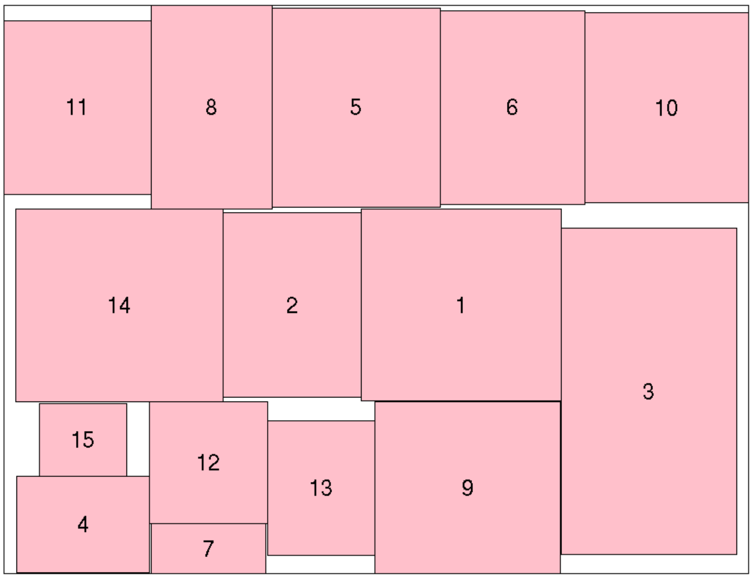

Figure A.21: Layout for TL91-15, flow costs = 3848.5

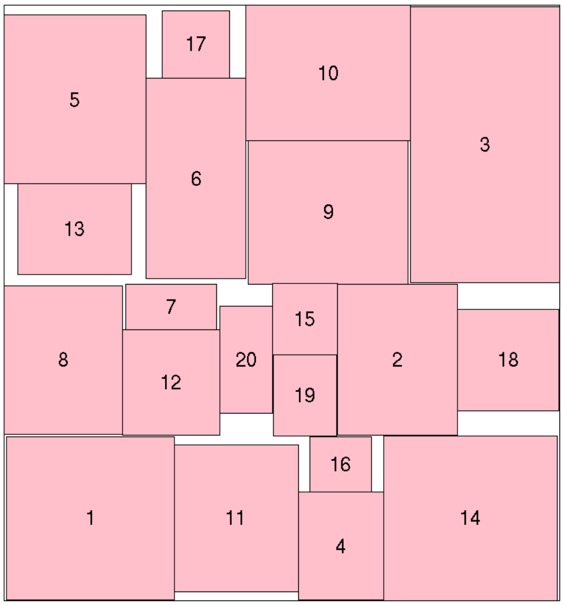

Figure A.22: Layout for TL91-20, flow costs = 7306.8

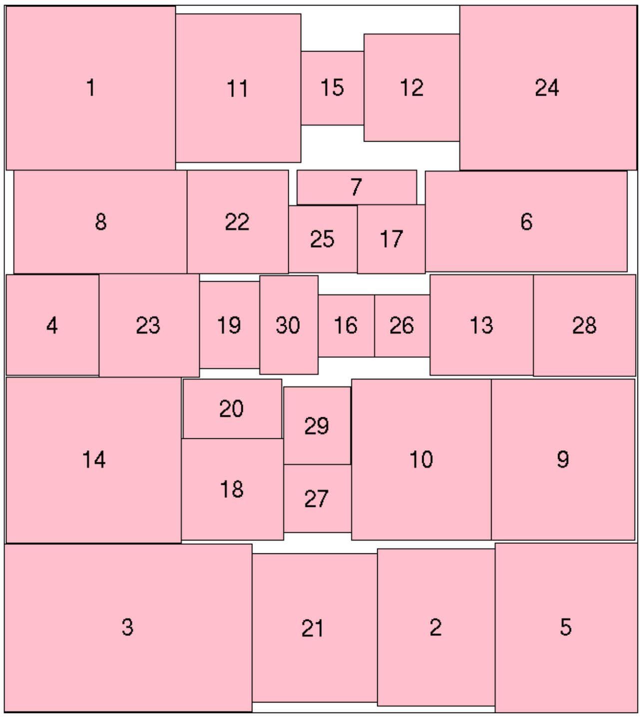

Figure A.23: Layout for TL91-30, flow costs = 16135.4