Student name:

Task number: 36

Amplifier design

Design one-stage transistor amplifier using

the active device ATF26884, Ids=30 mA at the frequency of 17 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 35

Amplifier design

Design one-stage transistor amplifier using

the active device ATF26884 at the frequency of 16.2GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 34

Amplifier design

Design one-stage transistor amplifier using

the active device ATF45171 at the frequency of 13GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 33

Amplifier design

Design one-stage transistor amplifier using

the active device ATF45171 at the frequency of 12GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 32

Amplifier design

Design one-stage transistor amplifier using

the active device ATF13170 at the frequency of 15 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 31

Amplifier design

Design one-stage transistor amplifier using

the active device ATF13170 at the frequency of 17 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 30

Amplifier design

Design one-stage transistor amplifier using

the active device ATF13136 at the frequency of 15 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 29

Amplifier design

Design one-stage transistor amplifier using

the active device ATF13136 at the frequency of 13 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 28

Amplifier design

Design one-stage transistor amplifier using

the active device AT60570 at the frequency of 4 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 28

Amplifier design

Design one-stage transistor amplifier using

the active device AT60570 at the frequency of 4 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 27

Amplifier design

Design one-stage transistor amplifier using

the active device AT64023 at the frequency of 4,5 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 26

Amplifier design

Design one-stage transistor amplifier using

the active device AT60570 at the frequency of 5 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 25

Amplifier design

Design one-stage transistor amplifier using

the active device AT60200 at the frequency of 3,6 GHz a Ic = 5 mA.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 25

Amplifier design

Design one-stage transistor amplifier using

the active device AT60200 at the frequency of 3,6 GHz a Ic = 5 mA.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 24

Amplifier design

Design one-stage transistor amplifier using

the active device AT60200 at the frequency of 3,5 GHz a Ic = 1 mA.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 23

Amplifier design

Design one-stage transistor amplifier using

the active device AT21400 at the frequency of 24 GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 22

Amplifier design

Design one-stage transistor amplifier using

the active device AT21400 at the frequency of 18GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 21

Amplifier design

Design one-stage transistor amplifier using

the active device NEC71000 at the frequency of 17GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 21

Amplifier design

Design one-stage transistor amplifier using

the active device NEC71000 at the frequency of 17GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 20

Amplifier design

Design one-stage transistor amplifier using

the active device NEC64535 at the frequency of 4.1GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 19

Amplifier design

Design one-stage transistor amplifier using

the active device NEC645 at the frequency of 1.6GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 18

Amplifier design

Design one-stage transistor amplifier using

the active device NEC2135 at the frequency of 3.7GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 17

Amplifier design

Design one-stage transistor amplifier using

the active device NEC24406 at the frequency of 10,5GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 16

Amplifier design

Design one-stage transistor amplifier using

the active device MAV11 at the frequency of 800 MHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 15

Amplifier design

Design one-stage transistor amplifier using

the active device BFG65 at the frequency of 1.7GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 14

Amplifier design

Design one-stage transistor amplifier using

the active device MGF1402 at the frequency of 14GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 13

Amplifier design

Design one-stage transistor amplifier using

the active device MGF1801 at the frequency of 5GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 12

Amplifier design

Design one-stage transistor amplifier using

the active device NEC70000 at the frequency of 20GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 11

Amplifier design

Design one-stage transistor amplifier using

the active device AT-12535 at the frequency of 10.2GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 10

Amplifier design

Design one-stage transistor amplifier using

the active device FHX05 at the frequency of 15GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 9

Amplifier design

Design one-stage transistor amplifier using

the active device FHX05 at the frequency of 18GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 8

Amplifier design

Design one-stage transistor amplifier using

the active device CFY65 at the frequency of 17GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 7

Amplifier design

Design one-stage transistor amplifier using

the active device VCM905 at the frequency of 8GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 6

Amplifier design

Design one-stage transistor amplifier using

the active device CFY65 at the frequency of 14GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 5

Amplifier design

Design one-stage transistor amplifier using

the active device BFR91 at the frequency of 800MHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 4

Amplifier design

Design one-stage transistor amplifier using

the active device BFR90 at the frequency of 1.8GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 3

Amplifier design

Design one-stage transistor amplifier using

the active device BFG65 at the frequency of 1.25GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 2

Amplifier design

Design one-stage transistor amplifier using

the active device AT-12535 at the frequency of 8GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/

Student name:

Task number: 1

Amplifier design

Design one-stage transistor amplifier using

the active device VCM905 at the frequency of 10GHz.. Input and output matching circuits shoul be designed:

a) using lumped components (L, C)

b) using microstrip lines.

Specifications, directions for formal output:

Microstrip lines shoud use a sheet of dielectrics possessing thicknesssíle h=0.8 mm, with 20 micrometer copper metallization. Substrate relative permitivity is 4, loss tangent factor 0,01. Find the bandwidth of the resulting amplifier.

The resulting protocol shoul contain this task specification, schematics of all circuits as well as all circuit element values and circuit performance plots (s_{11}, s_{22}, s_{21}). Yield analysis should be performed and documented as well.

Scattering parameters can be found at www.mide.cz/spar/